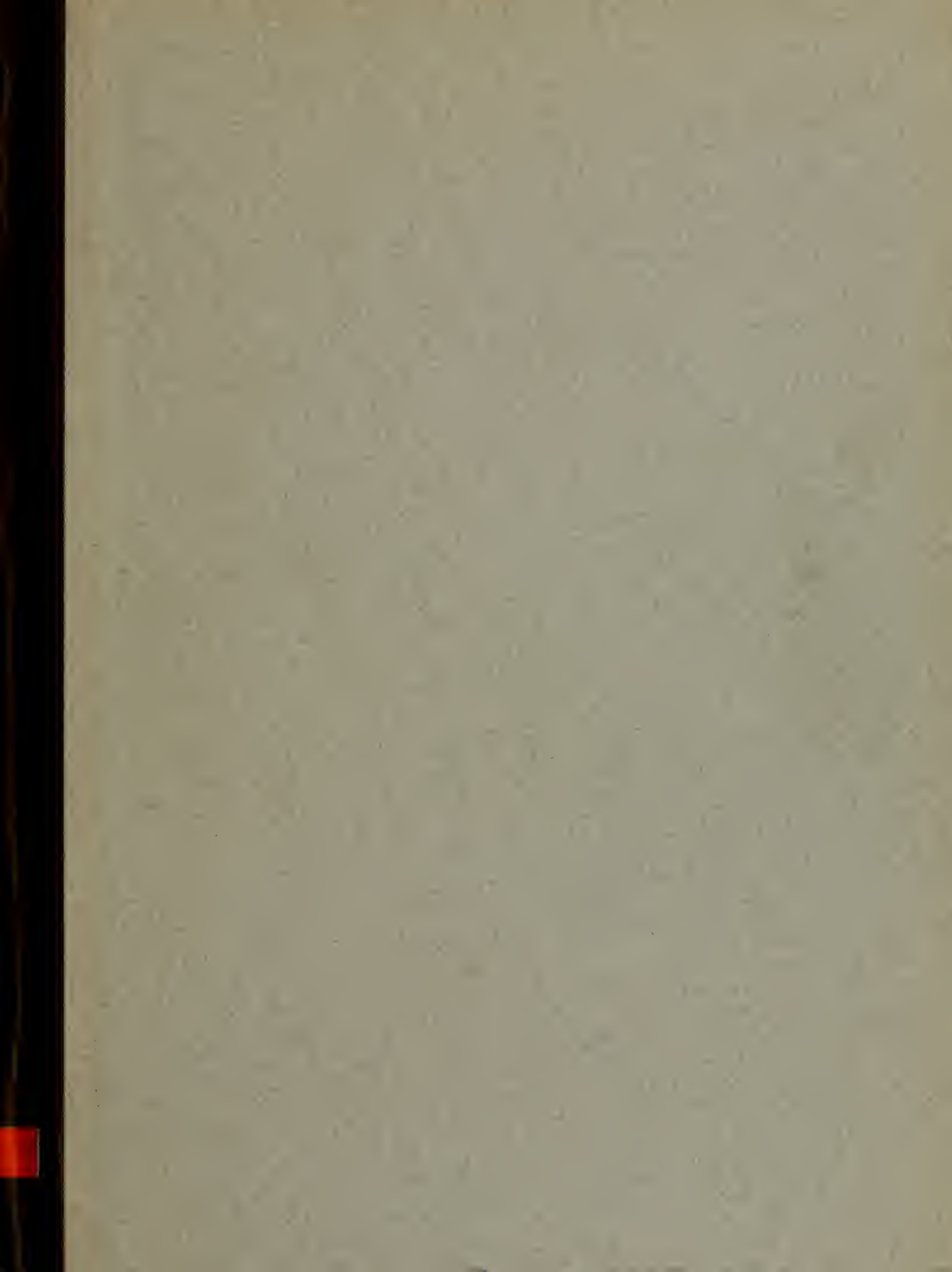






State of California
THE RESOURCES AGENCY

Department of Water Resources

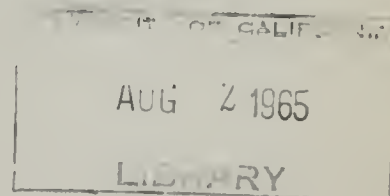
BULLETIN No. 91-11

WATER WELLS IN THE WESTERN PART
OF THE
ANTELOPE VALLEY AREA
LOS ANGELES AND KERN COUNTIES, CALIFORNIA

Prepared by
United States Department of Interior
Geological Survey

FEDERAL-STATE COOPERATIVE GROUNDWATER INVESTIGATIONS

MAY 1965



HUGO FISHER
Administrator
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EDMUND G. BROWN
Governor
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This report is one of a series of reports prepared by the United States Department of the Interior, Geological Survey, Ground Water Branch, which presents basic data on wells obtained from reconnaissance surveys of desert areas. These investigations are conducted by the Geological Survey under a cooperative agreement whereby funds are furnished equally by the United States and the State of California. The reports in this Bulletin No. 91 series are being published by the Department of Water Resources in order to make sufficient copies available for use of all interested agencies and the public at large. Earlier reports of this series are:

- Bulletin No. 91-1: Data on Wells in the West Part of the Middle Mojave Valley Area, San Bernardino County, California
- 91-2: Data on Water Wells and Springs in the Yucca Valley-Twenty-nine Palms Area, San Bernardino County, California
- 91-3: Data on Water Wells in the Eastern Part of the Middle Mojave Valley Area, San Bernardino County, California
- 91-4: Data on Water Wells in the Willow Springs, Gloster, and Chaffee Areas, Kern County, California
- 91-5: Data on Water Wells in the Dale Valley Area, San Bernardino and Riverside Counties, California
- 91-6: Data on Wells in the Edwards Air Force Base Area, California
- 91-7: Data on Water Wells and Springs in the Chuckwalla Valley Area, Riverside County, California
- 91-8: Data on Water Wells and Springs in the Rice and Vidal Valley Areas, Riverside and San Bernardino Counties, California
- 91-9: Data on Water Wells in Indian Wells Valley Area, Inyo, Kern and San Bernardino Counties, California
- 91-10: Data on Wells and Springs in the Lower Mojave Valley Area, San Bernardino County, California



UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Water Resources Division
Sacramento, California
95814

IN REPLY REFER TO:

CAL-G28t

October 28, 1964

Mr. William E. Warne, Director
California Department of Water Resources
P. O. Box 388
Sacramento, California, 95814

Dear Mr. Warne:

We are pleased to transmit for publication by the Department of Water Resources the U.S. Geological Survey report, "Data on Water Wells in the Western Part of the Antelope Valley Area, Los Angeles and Kern Counties, California," by W. R. Moyle, Jr.

This report, one of a series for the Mojave Desert region, was prepared by the Garden Grove (formerly Long Beach) subdistrict office of the Geological Survey in accordance with the cooperative agreement between the State of California and the Geological Survey. It tabulates all available data on wells in the western part of the Antelope Valley area and shows reconnaissance geology with special reference to the water-yielding deposits.

Sincerely yours,

Fred Kunkel
District Geologist

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DATA ON WATER WELLS IN THE WESTERN PART OF THE ANTELOPE VALLEY AREA,
LOS ANGELES AND KERN COUNTIES, CALIFORNIA

By W. R. Moyle, Jr.

PURPOSE AND SCOPE OF THE WORK AND REPORT

The data presented in this report were collected by the U.S. Geological Survey as a phase of the investigation of water wells and general hydrologic conditions throughout much of the desert region of southern California. The study was made in cooperation with the California Department of Water Resources.

The desert regions of California are characteristically regions of nearly barren mountain ranges and isolated hills surrounding broad valleys that are underlain by alluvial deposits derived from the mountains and hills. The valley areas generally contain ground water that has a wide range in chemical quality, but much of the water can be and has been developed for beneficial use.

The general objective of the cooperative investigation is to collect and tabulate all available hydrologic data for the individual desert basins in order to provide public agencies and the general public with data for planning water utilization and development works and for use in the overall ground-water investigation of the area.

Accordingly, the scope of the work includes: (1) A brief reconnaissance of major geologic features to determine the extent and general character of the deposits that contain the ground-water bodies; (2) a field examination of almost all the water wells in the area to determine the location of wells in relation to geographic and cultural features and the public-land net and to record well depths and sizes, types and capacities of pumping equipment, uses of the water, and other pertinent information available at the well site; (3) measurement of the depth to the water surface below an established and described measuring point at or near the land surface; (4) selection of representative wells to be measured periodically in order to detect and record changes of water level; and (5) collection and tabulation of well records, including well logs, water-level measurements, chemical analyses, and pump-test data.

The work has been done by the U.S. Geological Survey, under the general supervision of Fred Kunkel, district geologist in charge of ground-water investigations in California, and under the immediate supervision of P. M. Johnston and L. C. Dutcher, successive geologists in charge of the Long Beach subdistrict office. The fieldwork was carried on intermittently between March 1962 and August 1963 from the southern California subdistrict office of the Ground Water Branch at Long Beach.

LOCATION AND GENERAL FEATURES OF THE AREA

The western part of the Antelope Valley area, in Los Angeles and Kern Counties, is in the Mojave Desert region of California and comprises about 600 square miles, approximately between long $118^{\circ}10'$ and $118^{\circ}55'$ W. and lat $34^{\circ}35'$ and $35^{\circ}00'$ N. (fig. 1). The area is approximately triangular and is bounded on the northwest by the Tehachapi Mountains, on the southwest by the San Gabriel Mountains, and on the east by an irregular line as shown on figure 3. Many paved and unpaved roads cross the area; U.S. 99 and State 138 are the principal highways for automobile travel.

Only a few small towns are within the area, the largest being Gorman and Lebec on the western edge of the mapped area (figs. 2 and 3). The larger towns of Lancaster, Palmdale, and Mojave are east and north of the area.

The base maps (figs. 2 and 3) which accompany this report were compiled from all or parts of the following U.S. Geological Survey and Army Map Service topographic quadrangle maps: Bouquet Reservoir, Neenach, Rosamond, and Willow Springs, at a scale of 1:62,500; Burnt Peak, Lebec, and Liebre Mountain, at a scale of 1:24,000.

PREVIOUS WORK AND ACKNOWLEDGMENTS

The geology of the area has been described in numerous published and unpublished reports and the geologic map (fig. 3) included in this report was compiled largely from maps previously completed by others. The valley lands and adjacent mountains have been described in many reports and existing geologic maps show the major structures and rock units. Studies of the regional geologic features have been made by Johnson (1911, p. 1-89), Carpenter and Cosby (1926, p. 663-720), Thompson (1929, p. 289-370), and Cyril Williams (written commun., 1929). The geology of the Elizabeth Lake quadrangle has been described by Simpson (1934, p. 371-415), and that of the Lebec quadrangle has been described by Crowell (1952, p. 1-23). The Neenach quadrangle has been mapped by Wiese (1950, pl. 1), and by T. W. Dibblee, Jr. (written commun., 1963). T. W. Dibblee, Jr., also mapped and described the geology of the Bouquet Reservoir quadrangle (1961), the Willow Springs and Rosamond quadrangles (1963, p. 141-247), and parts of the Tejon quadrangle (written commun., 1963).

Hydrologic data for Antelope Valley are contained in several U.S. Geological Survey water-supply papers, in reports of the California Department (formerly Division) of Water Resources, and in reports by the Los Angeles County Flood Control District. All data included in previous reports have been tabulated herein and the source has been indicated in appendix A, table 1.

All known measurements of water level in wells made by all private and government agencies during the entire period of record, are listed in appendix B, table 2. Much information given in this report was obtained from ranchers or well drillers and owners who greatly facilitated the fieldwork and contributed materially to the completeness of the report.

GEOLOGIC AND HYDROLOGIC FEATURES OF THE AREA

Geologic Units and Their Water-Bearing Character

The geologic formations of Antelope Valley are divided into two main groups, the consolidated rocks and the unconsolidated deposits. The formations within these groups have dissimilar water-bearing characteristics, but, in general, the unconsolidated younger deposits of Quaternary age are more porous and permeable than the consolidated older rocks of pre-Tertiary and Tertiary age. The unconsolidated deposits generally underlie the valleys and contain most of the ground water stored in the area. The consolidated rocks form the mountains and hills, surround the valley area, underlie the unconsolidated deposits, and form the sides and bottom of the ground-water basin. The consolidated rocks, for all practical purposes, are impermeable, but are important because in the mountains and hills they receive the major part of the precipitation within the drainage area. It is the runoff from the mountains and hills that contributes the major part of the recharge to the ground-water body contained in the unconsolidated deposits. In the following paragraphs the geologic units, shown on figure 3, are described from oldest to youngest with special reference to their water-bearing characteristics.

The oldest formation in the area is the basement complex which consists of undifferentiated quartz monzonite, granite, gneiss, schist, and other metamorphic rocks, all of pre-Tertiary age. The basement complex is generally impermeable, except for joints and weathered zones that yield water to small springs.

The volcanic rocks, of Miocene age, are predominantly andesite flows with some interbedded tuff agglomerate, sandstone, and limestone. These rocks generally are not penetrated by wells; the few wells that have been drilled into these rocks yield very little water because the material has low permeability, even where fractured.

The Gem Hill Formation (Dibblee, 1961), part of the Tropico Group of Miocene (?) age, is composed of coarse, poorly sorted, tuff breccia and tuffaceous sandstone. The rocks of this formation have a low permeability and yield little or no water to wells.

The Santa Margarita Formation (Crowell, 1952), of Miocene age, is composed of well-bedded sandstone and conglomerate of marine origin. These rocks are low in permeability and yield almost no water to wells. In the mapped area, this formation is restricted to the western end of Antelope Valley, north of the San Andreas fault and south of the Garlock fault.

The continental deposits of Miocene age generally have low permeability and are composed of well-bedded conglomerate, sandstone, and shale. However, in some places the conglomerate and sandstone are fairly well sorted and, where saturated, may yield some water to wells.

The Fiss Fanglomerate (Dibblee, 1961), part of the Tropico Group of Miocene (?) age, is composed of brown, coarse, crudely stratified, poorly sorted, well-cemented volcanic debris. This formation crops out only at Fairmont Butte in Antelope Valley. No wells are known to penetrate the formation, which is in large part above the water table. However, if the formation extends below the water table, it probably has a low permeability and wells probably would have low yields.

The Anaverde Formation (Dibblee, 1961), of early to middle Pliocene age, is composed of moderately to well-bedded arkosic sandstone and conglomerate with thin beds of shale. This formation was, in part, deposited in shallow lakes in structural depressions and crops out between bifurcations of the San Andreas fault. Faulting has displaced and divided the formation areally into numerous blocks or compartments. Consequently, the yield and chemical quality of water from wells penetrating the formation may vary within short horizontal distances. The variations in chemical quality of the water are probably caused by gypsum beds which occur locally within the formation.

The Hungry Valley Formation of Crowell (1950), of late Pliocene age, is composed of sandstone and conglomerate. This formation is south of the San Andreas fault in the western part of the mapped area, near the town of Gorman. Many wells penetrate this formation but their yields generally are small.

The lake deposits, of Pliocene age, between the Garlock and San Andreas faults at the western end of Antelope Valley, are composed of siltstone, clay, and marl. A few oil-test holes penetrated these deposits, which were reported to be water bearing, but no tests were made to determine the yield or quality of the water. Based on appearance and lithology, it is probable that only small yields could be obtained from wells in this formation.

The older alluvium, of Pleistocene age, underlies most of the valley floor and consists mainly of poorly sorted sand and some gravel, silt, and clay. The older alluvium is oxidized and generally unconsolidated, but in some places is slightly cemented. This formation is porous and permeable, extends below the water table, yields water freely to wells, and is the most important water-bearing unit in the area.

The younger alluvium, of Recent age, consists of unconsolidated sand with small amounts of gravel, silt, and clay, and is being deposited on the lower parts of the fans and over the lowland plain. The alluvium is permeable and, where saturated, would yield water to wells. However, in this area it is nearly everywhere above the water table and therefore is not an important water-bearing unit, although it transmits water from the intermittent streams to the ground-water body.

The younger fan deposits, of Recent age, consist of unconsolidated angular boulders, cobbles, and gravel with small amounts of sand and silt. The fans are being formed by the intermittent streams that issue from the mountains and are composed largely of boulders and cobbles near the mountains and gravel near the valley floor. The fan deposits are poorly sorted and probably have a low permeability. In most places they are above the water table.

The playa deposits, of Recent age, are composed of silt, clay, and sandy clay with small amounts of soluble salts. Most of these deposits are along faults where there are structural depressions or sagponds that collect small amounts of water during periods of infrequent rain. The playa deposits, mapped in the area along the San Andreas and Garlock faults (fig. 3), yield small amounts of water containing low to moderate concentrations of dissolved solids. The playa deposits near Fairmont Butte and to the east in Antelope Valley are very thin, are above the regional water table, and are not considered a potential aquifer.

The dune sand of Recent age, consists of fine to medium sand deposited by westerly winds as dunes in four areas of small extent. The dunes have not been stabilized by vegetation and still drift during windy periods. The dune sand is everywhere above the water table and is not considered a source of ground water.

Recharge and Discharge of Ground Water

Recharge to the ground-water bodies of the area occurs by direct infiltration of rain and percolation of infrequent runoff from intermittent streams that drain the San Gabriel and Tehachapi Mountains. Rainfall on the valley floor averages less than 8 inches annually, but in the surrounding mountains may reach a maximum of about 20 inches per year. The average annual recharge is less than the pumpage; consequently, in excessively pumped areas the water levels have declined. The gradient of the water table, as shown by water-level measurements, suggests that runoff from the mountains supplies most of the recharge and that the water, in general, moves from west to east.

WELL-NUMBERING SYSTEM

The well-numbering system used in the western part of Antelope Valley area has been used by the Geological Survey in California since 1940. The system has been adopted by the California Department of Water Resources and by the California Water Pollution Control Board for use throughout the state.

Wells are assigned numbers according to their location in the rectangular system for the subdivision of public land. For example, in the number 8N/13W-6G1, the part of the number preceding the slash indicates the township (T. 8 N.), the part between the slash and the hyphen is the range (R. 13 W.), the number between the hyphen and the letter indicates the section (sec. 6), and the letter indicates the 40-acre subdivision of the section, as shown in the accompanying diagram.

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Within the 40-acre tract the wells are numbered serially as indicated by the final digit. Thus, well 8N/13W-6G1 is the first well to be listed in the $SW\frac{1}{4}NE\frac{1}{4}$ sec. 6, San Bernardino base and meridian lines.

The letter Z, substituted for the letter designating the 40-acre tract, indicates that the well was plotted from unverified descriptions; the described locations of such wells were visited, but no evidence of a well could be found.

There are a few exceptions to this system of numbering wells according to their position in the 40-acre subdivision of the section. These are wells, usually having long periods of record, which were assigned numbers based on earlier, less accurate maps. During this investigation, these wells have been plotted at the correct location on the map, but the old number has been retained to facilitate use of the older records for the well.

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Figure 1

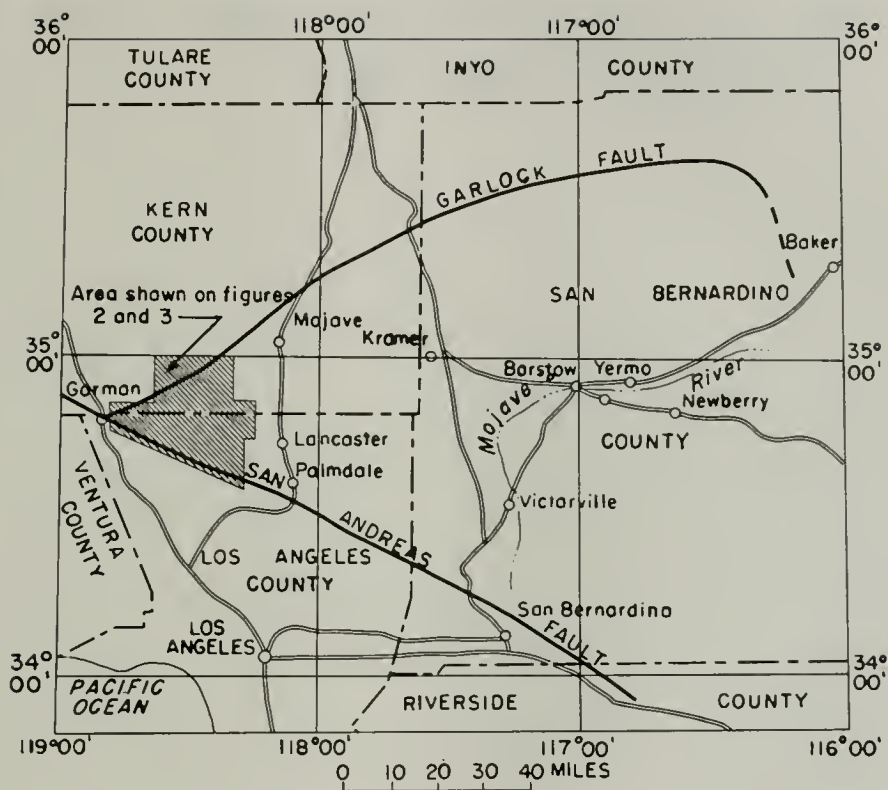


Figure 1.—Map of part of southern California showing the area described in this report

APPENDIX A

TABLE 1. RECORDS OF WELLS IN THE WESTERN PART OF THE
ANTELOPE VALLEY AREA, CALIFORNIA

Table 1.--Records of wells in the western part of the Antelope Valley area, California

USGS number: The number given is the Geological Survey number assigned to the well according to the method described in the section on well numbering.

Source of data and other numbers: BW Basement Wells in California and Nevada, by M. B. Smith (1959);

CW Cyril Williams (written communication, 1929); D driller; DGT David G. Thompson (1929);

DWR California Department of Water Resources; FC Los Angeles County Flood Control District;

GS U.S. Geological Survey; HRJ H. R. Johnson (1911); M Munger Oilgram; O owner; O&G California Division of Oil and Gas; P pump company; SCE Southern California Edison Co.; SCS U.S. Department of Agriculture, Soil Conservation Service; W California Water Rights Board; WP California Water Pollution Control Board.

Date of observation: The date given is the date on which the well was visited.

Owner or user: The name given is that of the owner or user of the well on the date indicated.

Year completed: The year given is the date the well was completed and was obtained from the driller's log or was reported by the owner or others.

Depth: Depths of wells given in whole feet were reported by owners, drillers, or others; depths given in feet and tenths were measured below land-surface datum by the Geological Survey.

Type and diameter: Type of well construction is indicated by the following symbols: B bored; C cable tool; D drilled; Dg dug by hand; R rotary. The number following the symbol is the diameter of the casing or pit, in inches; if the well is not cased, the symbol N is used.

Pump type and power: The type pump or method of lift is indicated as follows: C centrifugal; J jet;

L lift; N none; S submersible; Si siphon; T turbine. The type of power is indicated as follows:

D diesel; E electric motor of undetermined horsepower--a number appearing in this column indicates

the rated horsepower; G gasoline engine; Gr gravity; H hand operated; N none; W wind.

Use: Dm domestic; Ds destroyed or dry; Ir irrigation; Ps public supply; R recreation;

S stock; T test; Un unused.

Measuring point: The point from which water-level measurements by the Geological Survey are made

is described as follows: Bhc bottom of hole in casing; Bpb bottom of pump base; Hpb hole in pump

base; Ls land surface; Tap top of access pipe; Tc top of casing; Tcc top of casing cover;

Tf top of flange. The distance of the measuring point above or below (-) land-surface datum is given in feet and tenths and sometimes hundredths.

Altitude: The altitude given is the altitude of land-surface datum. Land-surface datum is an arbitrary plane that closely approximates land surface at the time of the first measurement and is the fixed plane of reference for all subsequent measurements. Altitudes given to the nearest foot were interpolated from topographic maps having 5-foot contour intervals. Altitudes given to the nearest tenth of a foot were determined by spirit leveling by Cyril Williams in 1929 or by the U.S. Geological

Survey, Topographic Division, in 1963.

Water level: Measured depths to water are given in feet, tenths, and hundredths, or feet and tenths; reported or approximate depths to water are given in whole feet. The distance between land-surface datum and the measuring point has been subtracted from or added to the measured water level. Thus, all water levels are referenced to land-surface datum.

Other data: C chemical analysis of water is given in table 4; L driller's log of well is given in table 3; P pump-test data are given in table 5; W additional water-level measurements are given in table 2.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level	Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use				

T. 6 N., R. 13 W.

6/13-4G1	GS	6- 4-63	Valley View Ranch		280	C 8	S 3	Dm	Tcc	0.1	2,805	104.50	L
4J1	GS	6- 4-63	Valley View Ranch			D 48	J E	Dm	Tc	1.7	2,790	34.39	
4Q1	GS	5-29-63	Wilfred Firsick		64.0	D 48	L N	Un	Tc	0	3,050	43.53	
4R1	GS	5-29-63	Wilfred Firsick			6	L 3/4	Dm	Hpb	1.0	2,950	(a)	
5L1	GS	5-23-63			53.8	C 10	N N	Un	Tc	0	3,350	51.75	
6A1	GS	5-23-63			48.0	8	N N	Ds	Tc	0	3,060	dry	
10D1	GS	5-29-63	L & L Gun Club			8	L W	Un	Tap	.5	3,050	110.92	

T. 7 N., R. 13 W.

7/13-3D1	GS	5-28-63	Bagley	1937	400	14	N N	Un	Tc	0	2,378	169.00	P,W
FC-11146													
W-1900800													
3D2	GS	5-28-63	Bagley			14	S E	Dm	Tc	.5	2,378	77.65	W

FC-11147

3E1	GS	5-29-63	Harry S. Webb	1918	400	12	T E	Un	Hpb 1.0	2,381	a219.10	L,P
FC-111147A												
W-1900334												
DGT-50												
		1-16-20									32	
3E2	GS	5-29-63	Harry S. Webb				S E	Dm		2,375	(b)	
3M1	GS	5-29-63	W. A. Stirling	1930	620	R 14	T G	Un	Tc .2	2,383	a173.60	
3M1	GS	5-29-63	Ellepulos Bros.	1949	550	R 14	T 100	Ir		2,380	(b)	L,P
4B1	GS	5-22-63	Carlos M. Morgan		550	14	T 50	Ir		2,389	(b c)	
	SCE	7-22-62									135	
	SCE	2-21-57									242	
4B2	GS	5-22-63	Carlos M. Morgan			14	S	4 Dm		2,389	a228	
4G1	GS	5-22-63	King and Fletcher			12	T	50 Ir	Bhc 1.0	2,389	257.65	
4G2	GS	5-22-63	King and Fletcher		9.0	12	N N	Ds		2,391	dry	
4H1	GS	5-22-63	King and Fletcher		11.0	8	N N	Ds		2,381	dry	

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point <u>(feet)</u>	Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use			Depth below lsd (feet)		

T. 7 N., R. 13 W.--Continued

7/13-4J1	GS SCE W-1900361	5-22-63 7-23-62	Owen W. Hale	1953	568	R	T 50	Ir	Tap 0.5	2,387	238.12 b261.5		P
4J2	GS FC-11147B	5-22-63	Owen W. Hale	1920	384.0	14	N N	Un		2,387	ds127		L,P
4K1	GS W-1901455	5-22-63	Marie Angle	1950	496	12	T 60	Un		2,392	(c)		P
4K2	GS D FC-11137	5-22-63 8-17-20	Marie Angle	1920	0 501.5	N 14	N N	Ds		2,392	40		L,P
4K3	GS	5-22-63	Marie Angle		98.0	14	N N	Ds	Tc 0	2,392	dry		
4L1	GS GS	5-21-63 5-14-63	A. Eliopoulos		481.0	12	N N	Un	Tc 0	2,396	e227.3 ds180		
4L2	GS	5-14-63	A. Eliopoulos			16	T 75	Ir		2,396	(b)		
4M1	GS	5-14-63	V. Santino	1952	908	R 14	T 125	Ir		2,403	(b)		L
4M2	GS	5-14-63	V. Santino	1929	820	C 16	N N	Un	Tcc 0	2,403	d190		

5A1	GS	5-14-63	Barbara Aznares	1957		6	J	2	Un		2,410	
5A2	GS	5-14-63	Barbara Aznares		0	N	N	N	Ds		2,410	
5B1	GS	5-14-63	Barbara Aznares	1945			T	75	Ir	Hpb 0	2,416	(a)
5B2	GS	5-14-63	Barbara Aznares		0	N	N	N	Ds		2,414	
5D1	GS	5-14-63	A. Ripley	1940	452	R 14	T	50	Ir	Bpb .5	2,427	(b) L,W
FG-11116A												
5E1	GS	5-14-63	Andrew Brand	1953	627	12	T	50	Ir		2,430	(b) 220
P W-1900771												
5E2	GS	5-14-63	Andrew Brand				J	2	Dm		2,430	(g)
5G1	GS	5-14-63	V. Santino				T	50	Ir		2,417	(b)
5H1	GS	5-14-63	E. Swauke	1924			N	N	Ds		2,408	
D 8- -24												
FC-111127												
5H2	GS	5-14-63	E. Swauke		370	10				Tc 0		40
5K1	GS	5-14-63	F. G. Godde	1943	504	R 14	S	1½	Un		2,408	(c) L
5-21-63												
5-21-63												
6- 2-54												
SCE												
W-1900821												
5K1	GS	5-21-63	F. G. Godde	1943	482.0	14	N	N	Un	Tc 0	2,412	a223.57 P
ds215												
207.1												

See footnotes at end of table.

6A5	GS 0	5-10-63 1957	August Affeldt	1957	400	R	7	S	5	Dm	Tc .6	2,433	233.44 200
6A6	GS 0	5-10-63 1940	August Affeldt	81942 1940	g249 100	R	24	N	N	Un	Tr 1.0	2,433	dal71.10
6B1	GS	5- 3-63	D. Reca		500			T	7½	Dm		2,446	(e)
6E1	GS P P	5- 9-63 8- 3-55 8- 3-55	Blas Gorrindo	1954	760	R	14	T	300	Ir	Tc 1.5	2,455	(b) 268.9 b292.5
	W-190060												
6E2	GS 0 0	5- 9-63 1954 1954	Blas Gorrindo	1938	643		16	S	E	Dm	Tc 0	2,460	202.5 237 b262
	W-190058												
6G1	GS SCE SCE	5- 3-63 1957 1957	D. Reca	1953	702	R	14	T	G	Ir	Hpb 1.0	2,446	(a) 194 217
	W-1900548												
6I1	GS	5- 9-63	Blas Gorrindo	1946	680		14			Dm		2,457	L,P
	W-1900059												
6N1	GS 0 0	5- 9-63	Blas Gorrindo	1925	702	R	14	S	E	Dm	Tc 0	2,462	220 b280
	W-1900057												

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level		Other data
				Year	Depth	Type	Pump	Use			Depth	below lsd (feet)	
				com- pleted	(feet)	eter	and	power					
					(in.)								

T. 7 N., R. 13 W.--Continued

7/13-6P1	GS FC-11107	5- 9-63	Blas Gorrindo	1943	680	R 14	N N	Un	Rnc 0	2,452		248.09	
6P2	GS	5- 9-63	Blas Gorrindo	1963	941	R 14	T 300	Ir		2,457	(b)		L,P
6R1	GS	5- 9-63	Del Sur School	1945	500	R 12	T 20	Ps	Tap .65	2,435	234.25		
7A1	GS	5-23-63	Romualdo Llerena	1956	500	R 12	T 70	Ir	Tap 0	2,436	b330.55		L,P
7B1	GS W-1900587	5-23-63	Albert Llerena	1937	610	14	T 150	Ir	Tap 0	2,446	(a b)		P,W
7B2	GS	5-23-63	Albert Llerena	1941	500		N N	Un		2,447	(h)		
7C1	GS W-1900588	5-23-63	Albert Llerena	1947	665	14	T 150	Ir	Hpb .15	2,454	236.63		P,W
7D1	GS	5-23-63	Howard W. Berry				T 60	Ir	Hpb 1.0	2,463	(b)		
7D2	GS W-1902357	5-23-63	Howard W. Berry		174.0	12	N N	Ds	Tc 0	2,463	dry		
7E1	GS W-1900636	5-23-63	Howard W. Berry				T 75	Ir		2,456	(c)		

7H1	GS FC-11108 W-1900640	5-23-63	Felix Arguedos	1954	605	R 14	T	60	Ir	Tap 0	2,432	(a)	P
7H2	GS SCS	5-24-63 9-12-44	Felix Arguedos		450	12	N N	Un			2,432	(h)	C,P
7J1	GS	5-24-63	Lazaro Gorrindo	1962	451	R 8	S	15	Ir	Tap 1.0	2,426	(a)	C
7J2	GS W-1900127	5-24-63	Lazaro Gorrindo	1947	450	R 12	T	40	Un		2,428	(c)	P
7K1	GS D FC-11108A	5-23-63 7- -55	J. C. Dyer	1955	603	R 14	T	50	Un	Tap 1.0	2,437	286.96 200	
7L1	GS	5-23-63	C. Henkel		500		E		Dm		2,450	f300	
7P1	GS	5-23-63	Ross Brezoff	1947	600	R 14	T	50	Ir	Bpb 1.0	2,447	268.45	L
7R1	GS W-1902283	5-24-63	Leandro Garde	1946	400	12	T	40	Ir		2,430	(c)	W
7R2	GS	5-24-63	Leandro Garde		450	10	L W		Un	Tec .5	2,431	(1)	
8B1	GS SCE SCE W-1900794	6-11-63	John Almandoz	1950	852	R 14	T G		Ir		2,428	(b) 235.6 b259.9	L,P
8B2	GS	6-11-63	John Almandoz	1954	440	R 6	S E		Dm		2,406	(b)	L

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data				Measuring point	Altitude of lsd (feet)	Water level	Depth below lsd (feet)	Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power					

T. 7 N., R. 13 W.--Continued

7/13-8C1	GS	6-10-63				12	N N	Ds	Tc	0.3	2,420	dry
8D1	GS SCE SCE W-1900793	6-11-63	John Almandoz	1949	650	R 14	T 100	Ir	Bhc	2.0	2,428	(a) 225.5 243.7
8G1	GS P P W-1900804	6-10-63 1954 1956	Frank Hanschmidt	1954	599	R 14	T 100	Ir			2,410	(b) b253 b275
8J1	GS	6-10-63	Frank Hanschmidt	1927	450	C 12	N N	Ds			2,410	
8M1	GS O FC-111118A FC W-1900914	6-10-63 2- -57 8-19-57 8-19-57	Carmona Bros.	1952	752	R 14	T 75	Ir			2,420	(b) 143 b257 240
8N1	GS FC-111119B	6-10-63	Carmona Bros.	1938	500	R 14	S 2	Dm			2,418	(j)
8Q1	GS	6-10-63	Jake Wittwer		640	12	T E	Ir			2,404	(b)
8Z1	GS FC-111118 D	6-11-63 3- -47 3- 8-24		1924	501		N N	Ds Ds			2,418	P 68

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use			Depth below lsd: (feet)		

T. 7 N., R. 13 W.--Continued

7/13-9L1	GS	6- 6-63	Donald Anderson	1952	440	R 12	J 1½	Dm		2,392	(c) b240 b225 215 126		
	P	9- -56											
	P	7- -54											
	P	7- -54											
	P	12- -52							Tc 0				
	W-1900041												
9M1	GS	6- 6-63				R 14	T 40	Ir	Tap .9	2,393	219.70		W
9N1	GS	6- 6-63				12	N N	Un	Tc 0	2,388	(a)		L
9N2	GS	6- 6-63		1944	345	R 12	T 50	Ir	Tc .3	2,395	(b)		
	FC	11-21-52									122.5		
	FC	12- 5-51									119.0		
	FC-11129A	11-29-50									113.3		
9P1	GS	6- 6-63			85	8	S E	Un		2,383	(c)		P,W
9Q1	GS	6- 6-63	William Finck	1947	492	R 12	T 35	Ir		2,381	(b)		
	W-1900076												
9Q2	GS	6- 6-63	William Finck	1928	300	R 10	J E	Dm		2,380	(c)		
9R1	GS	6- 7-63	A. F. Godde	1927		R	J 2	Dm		2,375	(c)		
9R2	GS	6- 7-63	A. F. Godde	1963	300	R 6	N N	Un	Tc .5	2,375	(a)		
9Z1	GS	6- 5-63			0	N	N N	Ds		2,380			C

LOM1	GS	5-29-63	Shersberg	1920	445	R 14	S	3	Dm	2,375	(c)	L
	D	6-30-20									21	
	FC-111148B											
LOM1	GS	6- 3-63	Ross H. Monson	1930	400	12	NN	Un	Tc	.3	2,374	asdl14.70
LOM1	GS	6- 3-63	A. F. Godde	1963	600	R 12	T	40	Ir		2,366	(c)
LOM2	GS	6- 3-63	A. F. Godde	1945	400	R 12	NN	Un	Tc	.3	2,366	199.80
	GS	6- 4-63										204.13
LOM1	GS	6- 4-63	A. F. Godde				J	2	Dm		2,369	(b)
LOM2	GS	6- 4-63	A. F. Godde	1906			NN	Un			2,369	10
	HAJ-41b	1908	W. Ohlson		250	7			Ir			16
LOM3	GS	6- 4-63	A. F. Godde				NN	Un			2,369	10
	HAJ-41a	1908	W. Ohlson	1905	590	7	CG	Ir				16
15D1	GS	6- 4-63	J. C. Towner	1935	254	R 10	S	2	Dm		2,366	
15D2	GS	6- 4-63	J. C. Towner		0	6	NN	De			2,366	
15E1	GS	6- 4-63				6	NN	Un			2,360	(c)
15M1	GS	6- 4-63				8	NN	Un	Tc	1.6	2,359	40.45
												W

See footnotes at end of table.

16B3	GS	6-13-63	D. A. Johnson	1939	356	14	N N	Un	2,374	(c)	P
FC-11139B											
16B4	GS	6-13-63	D. A. Johnson	1955	535	R 14	S E	Dm	Tap .4	2,374	(b) L
16C1	GS	6-13-63				18	N N	Un	Tc .5	2,380	ads215
16D1	GS	6-13-63	Leo G. Wagner	1937	450	14	T	50 Ir		2,386	(j) W
W-1900534											
16H1	GS	6-14-63					S	1 Dm		2,363	
16J1	GS	6-14-63	Mary Boverhof		100	6	J	1 Dm	Bhc .5	2,361	44.44 W
16R1	GS	6- 6-63	J. Schatz	1952	100	8	J	1 Dm		2,362	(c) L
	O	9- -62									40
	D	1952									30
16Z1	GS	6-13-63						Ds		2,365	
DGT-53 ^{k/}											
16Z2	GS	6-13-63	A. Whidden	1912	250	6	C				10
DGT-53 ^{k/}											
	GS	6-13-63	A. Whidden	1912	500	6		Ds		2,365	10
17B1	GS	6-11-63	R. C. Boyd	1919	502	16	T	20 Ir		2,401	(c) P,L
	D	12-22-19									38
FC-11129											
W-1900089											

See footnotes at end of table.

17N1	GS	6-11-63	William Stevens	1952	602	R	14	T	50	Ir	2,422	(b)	P
W-1901509													
17P1	GS	6-12-63	G. Montoia	1928	450	C	14	S	1	Dm	2,408	(c)	
17Z1	GS	6-11-63	R. C. Boyd					N	N	Ds	2,391		
17Z2	GS	6-12-63	Slater and Goldstine	1890	300	B	6	N	N	Ds	2,389		
HRJ-29													
FC-9820													
17Z3	GS	6-12-63	G. C. Earl		270		10	C		Ds	2,401		
DGT-54 ^k /1920													
17Z4	GS	6-12-63	G. C. Earl		600		8	C		Ds	2,401		
DGT-54 ^k /1920													
18B1	GS	5-27-63	P. W. K. Hairgrove		700			T	75	Ir	2,434	(c)	W
W-1900812													
18B2	GS	5-27-63	P. W. K. Hairgrove		700			T	60	Un	2,439	(c)	W
W-1900814													
18C1	GS	5-27-63	Savage Bros.		479.0		12	N	N	Un	2,445	e269.28	
SCS													
W. E. Johnson													
18C2	GS	5-27-63	Savage Bros.	1961	600	R	12	T	60	Ir	2,445	ab298	L
D													
6-28-61													
254													

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point of lsd (feet)	Water		
				Year com- pleted	Depth :(feet):	Type, diam- eter (in.):	Pump type and power	Use:		Altitude of lsd (feet)	Depth below lsd (feet)	Other data

T. 7 N., R. 13 W.--Continued

7/13-18Q1	GS	5-28-63	Harry E. Morsefield	450	6	L	3/4	Dm	Tap	0.5	2,450	235.58
18Q2	GS	5-28-63	Harry E. Morsefield	200	8	N	N	Ds	Tc	1.0	2,450	dry
18Q3	GS	5-28-63	Frank Yslas				L	E	Dm		2,441	(b)
18R1	GS	5-28-63	Jack Varley	500	R	8	S	5	Dm	Tcc	.07	2,430
	GS	5-28-63										t266.18
	0	8- -60										t262.35
18R2	GS	5-28-63	Jack Varley	1898	193.0	B	10	Ds	Tc	0	2,430	dry
	HRJ-27	1909			70		L	W	Dm			56
	FC-9810											L
18R3	GS	5-28-63	William Stevens				E	Dm				
19A1	GS	5-28-63	Neil Wolf	1930	400	8	S	1 1/2	Dm	Tap	.3	2,424
19A2	GS	5-28-63	Neil Wolf	g1961 1951	450 250		T	G	Ir			(c)
19A3	GS	5-28-63	Neil Wolf	1890	0	N	N	N	Ds		2,422	
	HRJ-26	1908	Los Angeles County		54							53

19A4	GS	5-28-63	Neil Wolf	1890	0		N N	Ds		2,427		
	HRJ-22	1908	J. E. Johnson		75	6	C G	Dm			59	
19D1	GS	5-24-63	Antelope Valley Sub. Station	1952	500	R 10	S 15	Ir		2,470		L, W
20B1	GS	6-12-63	Al Ferrais		307	12	N N	Un	Tcc .4	2,398	ads195	P
	W-1900787											
20B2	GS	6-12-63	Al Ferrais	1956	500	16	T 50	Ir		2,398	(b)	P
	W-1900788											
20C1	GS	6-12-63	Juan Lasa	1935	500	12	T 80	Ir		2,409	(b)	
20E1	GS	6-12-63	E. H. Wilson	1932		12	N N	Ds		2,425	(h)	
	GS	1932			500							
20E2	GS	6-12-63	E. H. Wilson	1956	605	R 12	T 60	Ir	Tc .65	2,424	(b)	P
	SCE	6- -56									274.35	
	W-1900380											
20F1	GS	6-12-63	F. Lasa	1929	455	C 12	T 40	Ir		2,413	(b)	
20G1	GS	6-13-63			111.0	12	N N	Ds		2,400	dry	
20G2	GS	6-13-63		1948	400	10	T 40	Ir		2,400		P
20G3	GS	6-12-63	Sistilli		.5	8	N N	Ds		2,396	dry	
20H1	GS	6-13-63	V. Brigante			12	N N	Un	Tc .4	2,388	91.80	

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring:		Water		Other data
				Year	Depth :(feet):	Type, diam- eter :(in.):	Pump type and power	point : : :(feet):	Altitude : of 1st :(feet)	Depth : below 1st :(feet)	level	Depth	
				com- pleted									

T. 7 N., R. 13 W.--Continued

7/13-20H2	GS	6-13-63	V. Brigante				S E	Dm		2,388	(c)		
20H3	GS	6-13-63	Howard Gentry				L N	Un		2,379			
20H4	GS	6-13-63	Howard Gentry	1930	240	6	S 1	Dm		2,379	(c)		
20H1	GS	6-12-63	Paul Peters	1950	256	8	N N	Un		2,432	(c)		
DWR		10-17-61									208.8		
DWR		4- 3-61									204.8		
DWR		10-23-57							Tap 0.2		210.8		
20M2	GS	6-12-63	Paul Peters	1962	350	6	J 1½	Dm		2,435	(b)		
20M3	GS	6-12-63	Mrs. Jack Clark		500		S E	Dm		2,449	(c)		
20M4	GS	6-12-63			153.0	12	N N	Ds		2,447	dry		
20M1	GS	6-12-63	Charles Marvin			14	N N	Ds		2,465	dry		
20M2	GS	6-12-63	Charles Marvin		500		T 15	Dm		2,465	(b)		
20Q1	GS	6- 6-63				14	T 40	Un			(1)		

2021	GS	6-13-63	Dall	1921	Dg		N N	De	Tc	3.0	2,375	36.9	W
	DGT-165	10- 4-21											
	FC-9821												
2022	GS	6-13-63	Mrs. M. H.	1890	560	3		De			2,415		
	RRJ-28	1908	Schliebler					Un					
21A1	GS	6- 6-63	Alain B. Regier		70	10	J	2 De	Tc	1.0	2,360	41.50	
21B1	GS	6- 6-63	Ballinger	1943				De	Tc	.33	2,365	67.67	
	DWR	3-12-58										68.67	
	DWR	10-21-57											
21B2	GS	6- 6-63	Ballinger					De			2,364		W
	FC-9831												
21C1	GS	6- 6-63	E. C. McBride					De			2,367		
21J1	GS	6- 5-63	W. S. McCullies	1929	410	12	N N	Un	Tc	1.0	2,371	176.98	W
	FC-9842												
21J2	GS	6- 5-63	W. S. McCullies		179.8	10	N N	Un	Tc	1.2	2,372	167.45	W
	FC-9842A												
21J3	GS	6- 5-63	W. S. McCullies		600	6	S N	Un	Tap	1.25	2,371.6	(1)	W
	FC-9842B												
21P1	GS	6- 5-63			13.0	10	N N	De			2,382	dry	
21Q1	GS	6- 5-63	Walter Schnider				T E	Ir			2,381	(b j)	

See footnotes at end of table.

USGS number	Source : of data : and : other : numbers	Date : of : observa- : tion	Owner or user	Well data					Measuring : point	Altitude : of lsd : (feet)	Water	
				Year : com- : pleted	Depth : (feet)	Type, : diam- : eter : (in.)	Pump : type : and : power	Use			level	Depth : below lsd : (feet)

T. 7 N., R 13 W.---Continued

7/13-22Z1	GS HRJ-253	6- 4-63 1908	Vysette	1893	227	2 3/4		Ds S					P
27D1	GS W-1900823	6- 5-63	Sundown Ranch	1942	360	12		N N Un	Bhc 1.0	2,387	a226.90		P, W
27E1	GS P P P W-1900822	6- 4-63 6-23-54 6-23-54 12- 5-39	Sundown Ranch	1939	400	14		T 50 Ir	Tap 1.3	2,398	ab254.7 b274.0 235.7 b121.7		P
27N1	GS FC-9843 W-1900820	6- 4-63	Sundown Ranch	1929	435	14		T E Ir	Bpb 1.0	2,418	(b i)		C, P, W
27N2	GS FC-8943B O O W-1902362	6- 4-63 10-29-57 1- 8-57 1- 7-57	Sundown Ranch	1957	540	R 14		T G Ir	Tap 1.0	2,425	(1) m289.2 384 389		
27N3	GS SCE W-1900815	6- 4-63 6-23-54	Sundown Ranch	1951	496	12		T G Ir		2,437	(a) 313.6		P

27N4	GS	6- 4-63	Sundown Ranch	1946	435	14	T	30	Ir		2,435	(b 1) b317.7 195.5 157.5	P
	P	6-23-54											
	P	10- 9-50											
	P	3-11-49											
	W-1900817												
28A1	GS	6- 5-63	Lewis Brigante	1932	305	8	S	1½	Dm	Tec 0	2,387	224.80 75	
	0	1932											
28E1	GS	6- 4-63	Dr. Helen Sanford			14	T	50	Dm	Tc 1.5	2,440	319.69	
28E2	GS	6- 4-63	Dr. Helen Sanford				N	N	Un		2,440	(c)	
28H1	GS	6- 4-63	Sundown Ranch	1952	530	14	T	125	Ir	Hpb .5	2,405	(a) b286.9 224.5 b294.5 209.5	P
	SCE	11- 7-56											
	SCE	11- 7-56											
	SCE	10-27-52											
	SCE	10-27-52											
	W-1900825												
28M1	GS	6- 4-63	William Gelle	1948	400	8	S	1½	Dm	Tec 0	2,446	(a) 295.65	
	GS	6- 5-63											
28P1	GS	6- 4-63		1927	1.6	6	N	N	Ds		2,475		W
	FC-9833												
28Q1	GS	6- 4-63			104.0	12	T	N	Ds		2,437	dry dry 70	L
	FC-9843A	10-27-42			106								
	D	1-17-20			351								
29G1	GS	6- 6-63	George Lane			16	N	N	Un	Tc .75	2,446	297.05	
29M1	GS	6- 5-63	George Ballian		500	8	S	1	S	Tc .5	2,580	a325.5	

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data				Measuring point	Altitude of 1st (feet)	Water level	Depth below 1st (feet)	Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power					

T. 7 N., R. 13 W.--Continued

7/13-29M1	GS	6- 5-63					E Dm		2,610				
29M1	GS D	6- 5-63 ?	Dr. M. M. Zack		450 R 8		L W Dm		2,570		320		L
29M1	GS D	6- 5-63 6-11-23			390 11		N N Ds		2,525				L
32M1	GS	5-23-63			1.0 6		N N Ds		2,765				
33A1	GS FC-9843C	6- 4-63	Congregational Church		12		S 1 Dm	Tec 1.5	2,445		a365.5		
33B1	GS	6- 4-63	Ben Robinette				T 75 Ps	Tap 1.0	2,510		b405.83		
33J1	GS	5-29-63	Portal Heights Properties		415.0 12		N N Un	Tec 1.0	2,515		382.85		
7/14-1K1	GS D	5- 9-63 12-30-60	Blas Gorrindo	1960	858 R 14		T 300 Ir		2,475		(b) 260		L,P

T. 7 N., R. 14 W.

1Q1	GS DWR DWR DWR	5- 9-63 3-14-58 11-19-57 10-23-57	Blas Gorrindo	1956	904	R 14	T 300	Ir	Tap 3.0	2,478	(b) 217.6 239.5 248	L
1R1	GS P P W-1900061	5- 9-63 2- -47 2- -47	Blas Gorrindo	1947	735	16	T G	Ir	Tc 1.5		193.5 b218.5	P
1Z1	GS HRJ-33 FC-11087	5- 9-63 1908	Blas Gorrindo Mitchell and Johnson	1889	113	B 13	N N W	Ds Dm		2,487	105	
2P1	GS HRJ-34 FC-11067	5- 1-62 1908	Mrs. Jones	1886	187	B 7	N N	Ds			160	
5E1	GS	4-18-62	L. A. Willey	1915	118	Dg 12	L E	Dm	Tc .5	2,758	b114.46	
6E1	GS O	4-19-62 1959	Fairmont Store		420	8	J 1	Dm	Tc .5	2,820	67.60 62	
7M1	GS	4-19-62	Lane	1961		14	N N	Un	Tc 1.0	2,795	17.83	
9G1	GS	5- 1-62	Eric Mumz		290.0	18	L W	S	Tcc .5	2,592	276.10	
9G2	GS M	5- 1-62 11-21-51	Eric S. Mumz Mumz No. 1	1951	195.2 n4,428	12 R	N N	Ds T	Tc 1.3	2,592	dry	

See footnotes at end of table.

JWSGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use			Depth below lsd (feet)		

T. 7 N., R. 14 W.--Continued

7/14-10E1	GS	5- 1-62	Eric S. Munz	1953	500	8	S 1 S	S	Tcc	0.3	2,570	286.00	P,W
10E2	GS	5- 1-62	Eric S. Munz			8		Un			2,570	(c) 200	
	HRJ-12	1909	Mrs. E. B. Potter	1881	227	D 10	L W	Dm					
10F1	GS	5- 1-62	H. S. Hansen		g365	8	S 1 S	S	Tcc	1.0	2,557	280.69	C,P,W
	GS	5-16-55	F. H. Ullman	1927	250	10	L W	Dm					
	FC-11048												
10P1	GS	5- 1-62	Mrs. Grace L. Specht		500	8	S E	Un	Tap	.3	2,583	314.03	W
10P2	GS	5- 1-62	Mrs. Grace L. Specht		42.5	8	N N	Ds	Tc	0	2,585	dry	
12N1	GS	5- 2-62			3.1	6	N N	Ds	Tc	0	2,490	dry	
12Z1	GS	5- 9-63			0		N N	Ds			2,487	113	
	HRJ-32	1908	Alexander Macready	1886	120	Dg 48		Un					
	FC-11079												
13A1	GS	5-10-63	Antelope Valley Field Station	1952	519	R 12	T 50	Ir	Tap	1.0	2,467	t279.78	,L,P
	FC-11099												
	W-1901566												

13BL	GS	5-13-63	Dr. A. N. Schumann	21.3	8	N N	Ds	2,478	dry
	DWR	10-23-57		240.8	8				dry
13LL	GS	5-13-63		400	R 6	L W	Un	2,491	(c) L
13QL	GS	5-13-63	Rudy Schwandt		7	S	1 1/2 Dm	2,490	b288.91 W
13Q2	GS	5-13-63	Rudy Schwandt	0	N	N N	Ds	2,490	C
	O	1914					Ds		
HRJ-30		1908	W. B. Nimmo	287	B 6	W	Dm	120	
14F1	GS	5- 1-62		109.3	4	N N	Ds	2,533	C, P, W
DGT-48		12-18-19		152		L W			dry
HRJ-35		1909	George Marigold	160		W			146.5
FC-9760									120
14J1	GS	5- 1-62	Mrs. Herbst	0			Ds	2,515	
HRJ-31		1909		175			Un	167	
15C1	GS	5- 1-62	Frank Geier	0		N N	Ds	2,595	
HRJ-40		1909		196	B 7		Un		dry
HRJ-40									f190
15H1	GS	5-13-63	Kurt Ullman	624	R 14	N N	Un	2,565	L
17Q1	GS	4-30-62		150	8	L W	S	2,885	78.92
18H1	GS	4-19-62	Carl Westerlind	2.0 Dg	144	S1 Gr	S	2,900	1.05
18R1	GS	4-19-62	Carl Westerlind	30.0	14	L W	S	3,150	b2.21 P
18R2	GS	4-19-62	Carl Westerlind	25.5	10	N N	Un	3,150	2.10

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth (feet)	Type, Pump diam- eter (in.)	type and power	Use			Depth below lsd: (feet)		

T. 7 N., R. 14 W.--Continued

7/14-18R3	GS	4-19-63	Carl Westerlind		Dg 60	N N	Un	Tc 0	3,125	.45		
20H1	GS	4-30-62			77.7	8 L N	Un	Tc 1.3	3,020	69.00		
21F1	GS	5- 1-62			128.5	6 N N	Ds	Tc .5	2,870	dry		
21M1	GS	5- 1-62				8 L N	Un	Tcc 0	3,000	57.74		
23P1	GS M	5- 1-62 6-29-51	Rudy Schwandt Schwandt No. 46		0 3,153	N N N	Ds T		2,690			L
24A1	GS	5-22-63			128.3	8 L N	Ds	Tc 1.0	2,490	dry		
25N1	GS	5-22-63	Cochems Ranch	1886	16.3	Dg 48 L W	Dm	Tc 1.0	2,940	10.86		
26D1	GS	5- 1-62			2.95	Dg 72 N N	S	Tc 0	2,760	1.65		
27B1	GS	5- 1-62	F. H. Ullman	1912	300	C 4½ L W	S	Tc 1.0	2,835	152.00		W
28B1	GS	5- 1-62	Barrow		300	6 L E	Dm	Bpb 1.3	3,200	46.76		
36B1	GS	6- 6-63			Dg 84	N N	Un	Tc 0	2,850	8.15		

36B2	GS	6- 6-63	6.3	Dg	30	L W	Un	Tec	2.0	2,850	dry
36K1	GS	6- 6-63			8	L W	Un	Tc	1.0	3,125	a59.3

T. 7 M., R. 15 W.

7/15-2A1	GS	4-18-62			8	L G	S	Tc	.8	2,870	b94.54
2E1	GS	4-18-62	n400		8	S E	Dm	Tec	1.0	2,960	331.90
3H1	GS	4-18-62	295+	R	12	N N	Un	Tc	.5	3,010	d260.0
4H1	GS	4-16-62			8	L W	Un	Tec	.32	3,050	76.83
12E1	GS	4-18-62	1945		12	N N	Un	Tec	1.8	3,020	48.19
12E2	GS	4-18-62	1934		126	T 10	Dm			3,015	fbc43 P
12H1	GS	4-19-62		D	36	N N	Un	Tc	1.5	2,825	2.80 P

T. 8 M., R. 12 W.

8/12-6C1	GS	5-10-63	1951	R	6	J 1	Dm			2,343	(e)
6E1	GS	5-10-63			10	J 1	Dm	Tc	.7	2,345	81.60 W
6M1	GS	5-14-63	0			N N	De			2,346	
	GS	4-20-51	38.7	Dg	6	N N	De	Tap	5.7		dry

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring		Altitude		Water		
				Year	Depth	Type, diam-	Pump type	Use	point	of lsd	Depth	Other			
													com-	pleted	(feet)

T. 8 N., R. 12 W.--Continued

8/12-6P1	GS	5-14-63	J. H. Gregory	103		4	T	2	Dm		2,343	(b)
30D1	GS	5-28-63		67.0	R	6	N	N	Un	Tc	0	2,330
	GS	3- 3-52										60.85
	GS	4-26-51		165.0								35.99
30M1	GS	5-28-63	McCarver	500		6	J	1	Dm	Tc	.5	2,330
	GS	4-26-51			D	6	T	G	S			(1) (c)
30M2	GS	5-28-63				8	S	1½	Dm	Tap	.9	2,329
												56.63

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T. 8 N., R. 13 W.

8/13-1B1	GS	3- 9-63	A. Berthiaume	1956	225	C	6	T	2	Dm			2,352	(b)
1B2	GS	5-13-63					8	J	1	Dm	Tcc	1.5	2,354	93.41
1C1	GS	5- 9-63	George E. Pierce	1952	160		8	N	N	Un	Tc	0	2,355	105.94
1D1	GS	5-15-63	R. Wood		250	C	6	S	1½	Dm	Tcc	1.5	2,364	(b)
1D2	GS	5-15-63	R. Wood	1952	150	R	8	N	N	Un	Tc	.5	2,364	114.39
1D3	GS	5-15-63				R	8	S	2	S			2,363	(c)
1D4	GS	5-15-63					6	N	N	Un	Tc	1.0	2,363	114.24

1G1	GS	5-14-63	A. Chandler				8 S E	Dm	Tec	.4	2,350	84.42
1K1	GS	5-14-63	Martin	1959	180		8 L W	Dm	Tc	.4	2,361	99.34
1L1	GS	5-14-63	L. Burke	1963			6 S E	Un	Tap	.8	2,360	109.12
1M1	GS	5-14-63			83.0		8 L H	Ds			2,360	dry
1M2	GS	5-14-63	Art Lynn	1953	190		8 T 1	Dm	Tc	.3	2,361	(b)
1M3	GS	5-14-63	Roy Sabaguci				8 S E	Dm	Tap	1.0	2,363	104.42
1N1	GS	5-14-63	J. Blasbak	1933	440		6 T 3	Dm	Tc	1.0	2,362	112.80
1P1	GS	5-14-63	Mrs. Gueci	1962	255		6 S 3	S			2,358	(c)
1P2	GS	5-14-63	Mrs. Gueci		110		8 T 1	Un	Tc	.5	2,358	98.95
2C1	GS	5-15-63	Losey		307		8 T 15	Ir	Tc	.1	2,377	146.51
2C2	GS DOT-32	5-15-63	Losey L. M. Huntington		112 420		6 N N 6 C	Ds			2,377	dry 18
2C3	GS	5-15-63	Losey		32		6 N N	Ds	Tc	1.0	2,377	dry
2D1	GS GS W-1900133	5-15-63 12- 5-51	Duncan Merle Curtis		169 475		12 T N 12 T 30	Un Ir	Hpb	.3	2,381	dry 89.53
2D2	GS	5-15-63	Duncan		350		6 S 14	Dm			2,381	(1)

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data				Measuring point	Altitude of lsd (feet)	Water		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power			level	Depth below lsd (feet)	

T. 8 N., R. 13 W.--Continued

8/13-2F1	GS DGT-31 HRJ-89	5-15-63 1920 1908	White F A. Ingersoll Ingersoll		15.8 336 300	N N C B 6	Ds Dm		2,377	dry 22 7.75		C,P
2Q1	GS	5-15-63	Duck Club				T 75 R	Tap 0.5	2,373	212.29		
2Q2	GS	5-15-63	Duck Club				S 1½ Dm		2,373	(b)		
2R1	GS	5-15-63			44	7	N N	Tc 2.0	2,370	dry		
2Z1	GS HRJ-88	5-15-63 1908	Stett	1908	0 330	B 6	Ds		2,380	32		
3M1	GS W-1900669	3-20-63	Tullos Ranch	1955	765	R 14	T 60 Dm		2,400	(c)		L,P
4B1	GS W-1900673	3-20-63	Tullos Ranch	1946	605	R 14	N N	Un	2,407	(c)		P
4E1	GS W-1900672	3-20-63	Tullos Ranch	1920	670	C 14	N N	Un	2,419	(c)		P
4N1	GS W-1900671	3-20-63	Tullos Ranch	1951	761	R 16	N N	Un	2,420	(c)		P
4Q1	GS W-1900670	3-20-63	Tullos Ranch	1954	687	R 14	N N	Un	2,410	(c)		L,P

5E1	GS	3-27-63	Westview Development Company	552	18	T	75	Ir	Tc	.17	2,440	(b)	P,W
FC-12418													
5F1	GS	3-27-63	Westview Development Company		12	T	100	Ir	Tap	2.0	2,433	(b)	P
W-1900796													
5F2	GS	3-27-63	Westview Development 1947 Company	705	20	T	75	Ir			2,431	(b)	P
	FC	5-10-47							Tc	1.0		161	
	FC-12418A	11-7-45										96.9	
W-1900795													
6D1	GS	3-7-63	Ritter and Godde	552	R 12	T	50	Ir	Tap	.5	2,462	256.00	
6E1	GS	3-27-63	P. F. Kyle	457	16	T	60	Ir	Tap	.5	2,462	258.70	P
W-1900599													
6G1	GS	3-27-63	Martinez Ranch	526	R 16	N	N	Un	Tc	0	2,448	e255.10	P
W-1900051													
6G2	GS	3-27-63	Martinez Ranch	700	R	T	100	Ir	Tc	0	2,448	(b)	L,P
6G3	GS	3-27-63	Martinez Ranch		N	N	N	Ds					C,P
	HRJ-13a	1908	F. D. Day	76	7	L	W	Dm			2,449	60.5	
6G4	GS	3-27-63	Martinez Ranch		N	N	N	Ds					
	HRJ-13b	1908	F. D. Day	80	7	L	W	Dm			2,449	60.5	C,P

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data				Measuring point (feet)	Altitude of 1st (feet)	Water		Other data	
				Year com- pleted	Depth (feet)	Type, Pump diam- eter (in.)	Power and power			Use	level		Depth below 1st (feet)
T. 8 N., R. 13 W.--Continued													
8/13-6H1	GS DGT-28	3-27-63 1908	Martinez Ranch Gust Rottman		100	14 T	Un		2,444	(c h) 56	P		
6H2	GS	4-30-63	Martinez Ranch	1963	702	R 14 T D	Un	Tc 1.5	2,422	s283.5	L,P		
6I1	GS FC-12399 W-1900584	3-28-63	Lancaster Ranches Inc.	1925	303	12 S E	Dm		2,458	(c)	P,W		
6M1	GS	3-28-63	Lancaster Ranches Inc.	1963	607	R 14 T 75	Ir		2,456	(b)	P		
6N1	GS	3-28-63	Lancaster Ranches Inc.	1939	523	16 T 100	Ir		2,463	(b)	P		
	SCE SCE SCE FC-12399A W-1900585	9- 3-52 9- 3-52 1-24-47 11-24-41						Tap 2.0		b217 204 114 167			
6Q1	GS	3-28-63	Lancaster Ranches Inc.	1954	597	R 14 T 75	Ir	Tap .5	2,453	(b)	L		
	FC-12409B W-1900583	9-22-59								314.5			

6R1	GS	3-28-63	Lancaster Ranches Inc.	1914	301	8	N	N	Un	Tc	0	2,447	(c)	L,P
	D	1914	J. Ward	1914	301	8							72	
	DGT-27 FC-12409													
7A1	GS	4-11-63	Frank Munnell	1944	211.5 343	R 14	N	N	Un	Bhc	.5	2,449	dry	L
	O	1944												
	FC-12409A													
7A2	GS	4-11-63	Frank Munnell	1952	420	R 14	T	75	Ir	Hpb Bhc	.25 0	2,447	(b) 274.6	
	SCE	6-26-56												
	W-1902066													
7B1	GS	4-11-63	Frank Munnell		496	R 14	T	100	Ir	Tap	1.0	2,453	(b) 270	L,P
	P	1- -61												
	W-1902773													
7D1	GS	4-10-63	Charles Gray	1928	199.0	14	N	N	Un	Tcc	0	2,458	(a) 101.5 90.9 82	L
	FC	12-7-43												
	FC-12399B	12-6-40			265									
	D	1928												
7D2	GS	4-11-63	Charles Gray		380	14	T	75	Ir	Tc	1.0	2,465	(b)	
7E1	GS	4-11-63	Frank Munnell		404.6	R 14	N	N	Un	Tc	.35	2,442	224.2	W
	FC-11100													
7J1	GS	4-11-63	Frank Munnell	1956	497.0	14	N	N	Un	Tap	1.0	2,442	248.50 207 b349	
	O	1955												
	O	1955												
	W-1900984													

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring		Altitude of lsd (feet)	Water		Other data
				Year	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use	point	(feet)		level	Depth below lsd (feet)	

T. 8 N., R. 13 W.--Continued

8/13-7P1	GS	4-11-63	Frank Munnell		443.0	14	N N	Un	Tc	0	2,451	249.21		
7R1	GS	4-11-63	Frank Munnell	1951	500	14	T 80	Ir	Hpb	.25	2,445	(b)		
	0	1955										200.75		
	0	1955										220.15		
	W-1900985													
8C1	GS	4-17-63		1938	2.0	6	N N	Ds	Tc	1.0	2,436	dry		W
	D	1938			120									
8D1	GS	4-17-63	Rogers School		53.3	6	N N	Ds	Tc	.2	2,442	dry		W
	FC-12419A													
8D2	GS	4-17-63	Rogers School		1.0	5½	N N	Ds			2,442			
8D3	GS	4-17-63	Andy Seminario	1961	570	R 14	T 75	Ir			2,437	(b)		L,P
8D4	GS	4-17-63	Andy Seminario	1954	550	R 14	N N	Un	Tc	0	2,442	244.59		
	W-1900986													
8N1	GS	4-17-63	Michael Skope	1938	500	14	T 50	Dm	Hpb	.5	2,443	(c)		P
	0	2- -57							Hpb	.5		142.5		
	W-1900913													
8N2	GS	4-17-63		1949	365	14	T 75	Un	Bhc	.2	2,443	(i)		
8N3	GS	4-17-63	Michael Skope		218.0	12	N N	Un	Tc	0	2,443	ds171.80		P
	DGT-29	1- -20	Brooks		350		T					50		

8Q1	GS	4-17-63	Mario Prevedello	1948	485	R 14	T 75	Ir	Tc 0	2,435	278.58	P
	W-1900556											
9D1	GS	4-17-63	Oliver Ranch			16	N N	Un	Tc 1.0	2,422	ds253.82	
9K1	GS	4-17-63				14	N N	Un	Tc 0	2,412	211.63	W
9K2	GS	4-18-63	Dr. Wallace		541.0	14	T 100	Ir	Tc 0	2,413	ds223.50	
9N1	GS	4-18-63	Dr. Wallace		610	R 14	T 100	Ir	Tc 1.0	2,423	(b c) 219	
	D	9- 9-60										
9N2	GS	4-18-63	Dr. Wallace			16	N N	Un	Tc 0	2,423	(e d)	
10A1	GS	5-16-63	E. A. Fox	g1961	212	R 8	S 1	Dm	Tap .2	2,384	131.71	
10D1	GS	5-16-63	George Kindig	1949	500	R 14	T 40	Ir	Tc .8	2,402	(b) 149.3 b172.3	P
	SCE	8-10-55										
	SCE	8-10-55										
	W-1901098											
10D2	GS	5-16-63	George Kindig	1959	540	R 14	T 75	Ir	Tap .5	2,402	(b)	L,P
10H1	GS	5-16-63	A. D. Alford	1957	210	R 6	T 7½	S	Tap .5	2,387	(b)	
10R1	GS	5-16-63			0	2½	N N	Ds	Tc .7	2,388		
11E1	GS	5-17-63		1920			T 7½	Ir	Tc 1.5	2,386	(c)	L,P
	D	7-27-20	Nebecker	1920	452	16			Tc 1.5		21.5	
	DGT-158											
	W-1901047											

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring		Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use	point	Depth below lsd (feet)				

T. 8 N., R. 13 W.--Continued

8/13-11G1	GS P P W-1901048	5-17-63 5-2-56 12-19-53		1927	620	12	T 100	Ir	Tc	0	2,376 169 123	(b)	P
11M1	GS W-1901050	5-17-63		1955	720	R 12	T 75	Ir	Tap	.5	2,386	(b)	L,P
11Q1	GS W-1901049 DWR-14B1	5-17-63		1928	575	16	T 100	Ir	Hpb	0	2,374	(b)	P,W
12K1	GS	5-20-63					T 3	Dm			2,356	(1)	
12R1	GS	5-17-63	Armintrout	1956	110	R 6	J 1½	Dm	Tap	0	2,347	(b)	
14B2	GS	5-21-63			118.0	6	N N	Un	Tc	1.0	2,370	all 17.5	
14J1	GS	5-21-63				6	N N	Un	Tc	1.0	2,370	126.55	
14K1	GS	5-21-63	Edgar Stovall	1960	350	R 8	S 3	Dm			2,376	(c)	
14K2	GS	5-21-63	Edgar Stovall		51.6	6	N N	Ds	Tc	.4	2,376	dry	

14K3	GS	5-21-63	Edgar Stovall	1952	136.7	R 6	N N	Ds	Tc	.3	2,376	dry
14K4	GS	5-21-63	Edgar Stovall		0		N N	Ds			2,376	
14Q1	GS	5-21-63	Signett	1957	150	R 6	S 3/4	Dm	Tc	.3	2,376	133.55
14R1	GS	5-21-63			118.0	R 6	N N	Ds	Tc	1.0	2,371	dry
14R2	GS 0	5-21-63 5-21-63	H. A. Robibeaux	g1962 1958	145 120	R 8	S 1	Dm			2,370	(b)
14Z1	GS HRJ-86	5-21-63 1908	A. J. Renner	1907	200	B 6		Ds Un			2,378	30
14Z2	GS HRJ-283	5-21-63 1908	A. J. Renner	1906	420	B 5	5/8	Ds Un			2,377	22
14Z3	GS	5-21-63						Ds			2,376	
	HRJ-87	1908		1907	200	B 6						30
15D1	GS	5-15-63	Mrs. Hall			R	T 50	Ir			2,403	(c)
15D2	GS	5-16-63	Mrs. Hall				S E	Dm			2,403	(c)
15E1	GS 0 W-1900543	5-22-63 8-15-55	P. S. Kindig	1947	485	R 12	T 60	Ir	Tap	.3	2,404	(b) 180
15K1	GS	5-22-63	Antone Saldubehere				T 75	Ir			2,393	(b)

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data				Measuring point	Altitude of lsd (feet)	Water		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power			level	Depth below lsd (feet)	

T. 8 N., R. 13 W.--Continued

8/13-15M1	GS	5-22-63	Antone Saldubehere	1953	551	R 14	T 60	Ir	2,402	(b)	178 184 190 196	P
	0	1956										
	0	1955										
	0	1954										
	0	1953										
	W-1900998											
15M2	GS	5-22-63	Antone Saldubehere		0		N N	Ds	2,402			
15N1	GS	5-22-63		1952	538	R 14	T 75	Ir	2,402	(c)	241.8 270	P
	P	1956										
	P	1956										
16K1	GS	4-23-63	Olson Farms Inc.	1948	443	R 16	T 100	Ir	2,412	(f)		P
	W-1901489											
17E1	GS	4-18-63	Outdoor Enterprises Inc.	1942	471	R 14	N N	Un	2,444	(c h)	b251.9 b232.6 b219.5	L,P
	SCE	8-31-55										
	SCE	9-30-54										
	SCE	6- 8-54										
	FC-11111							Tap	.5			
	W-1901029											
17E2	GS	4-18-63	Outdoor Enterprises Inc.	1954	597	R 16	N N	Un	2,443	(c h)	b283.8 b273.4 b256.8	L,P
	SCE	8-29-56										
	SCE	8-31-55										
	SCE	8-31-54										
	WP-15580											
	W-1901032											

17F1	GS	4-18-63	Outdoor Enterprises 1952 Inc.	570	R 14	N N	Un	Tap	1.0	2,438	284.52	L,P,W
	FC-11111C W-1901031											
17G1	GS	4-18-63	Outdoor Enterprises Inc.	490	16	N N	Un			2,432	(c h)	P
	SCE	8-29-56									b280.0	
	SCE	8-31-55									b292.2	
	SCE	9-30-54									b241.8	
	SCE	6- 9-54									b231.8	
	W-1901030											
17J1	GS	4-18-63	Outdoor Enterprises 1956 Inc.	845	R 16	T 75	Un	Tap	.5	2,421	(c)	L,P
	SCE	8-30-56		945							b267.3	
	D	8- 4-56										
	FC-111121 W-1901028											
17L1	GS	4-18-63	Outdoor Enterprises 1953 Inc.	504	14	T 25	Un	Tap	1.0	2,432	288.67	P
	FC-11111B W-1901026											
17M1	GS	4-18-63	Outdoor Enterprises 1945 Inc.	477	R 14	N N	Un			2,443	(c h)	L,P
	SCE	8-29-56									b288.4	
	SCE	8-31-55									b271.9	
	SCE	8-31-54									b242.5	
	SCE	6- 9-54									b223.5	
	FC-11111A W-1901025											
17N1	GS	4-18-63	Outdoor Enterprises 1951 Inc.	666	16	N N	Un			2,440	(c h)	P
	W-1901027											

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water		Other data	
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use			Level	Depth below lsd: (feet)		
T. 8 N., R. 13 W.--Continued														
8/13-18E1	DWR	4- 8-63	Ross E. Brezoff			14	T 40	Ir	Bpb 1.0	2,465	t259.5			
18K1	GS W-1902264	4-23-63	Joel McCrea	1955	600	R 14	S 100	Un	Tcc 0	2,447	(i)		P	
18K2	GS W-1902261	4-23-63 1957	Joel McCrea		241.0 487	16	N N	Un	Tc 0	2,454	143.18		P	
18N1	GS FC-11092A W-1902265	4-23-63	Joel McCrea	1950	480	R 12	T 60	Ir		2,462	(c)		L,P	
18N2	GS	4-23-63	Joel McCrea	1957	499	R 14	T 60	Ir		2,460	(j)		L,P,W	
18Q1	GS O D FC-11102 W-1902262	4-23-63 2- -57 4- -55	Joel McCrea	1955	600	R 16	S 150	Ir	Bhc 0	2,447.5	(b) b220 192		L	
18Q2	GS FC-11102A W-1902263	4-23-63	Joel McCrea	1956	533	14	S 100	Ir	Tcc 1.0	2,453	267.88		L,P	
18Q3	GS D	4-25-63 4-18-57	Joel McCrea	1957	0 1,366	N 14	N N	Ds T		2,447				

19B1	GS	4-25-63	Lancaster Downs	1928	500	12	T	50	Ir	Hpb	1.5	2,450	(i)	P
	W-1901136													
19C1	GS	4-25-63	Lancaster Downs	1951	507	R 14	T	75	Ir			2,456	(b)	L,P
	W-1901138													
19D1	GS	4-25-63	Lancaster Downs		364	12	T	50	Un	Tc	0	2,462	(i)	
	0	9-18-51											177.5	
19D2	GS	4-25-63	Lancaster Downs	1928	255.5	12	N	N	Ds	Tc	.5	2,457	dry	P
	0	1928			500									
	W-1901137													
19E1	GS	4-25-63	Lancaster Downs	1955	670	R 14	T	100	Ir	Tc	0	2,455	(i)	P
	W-1901139													
20B1	GS	4-26-63	Lancaster Ranches	1953	610	16	T	100	Ir	Tap	.5	2,430	256.83	L,P,W
	FC-11112		Inc.											
	W-1900081													
20B2	GS	4-26-63	Lancaster Ranches	1933	158.0	8½	N	N	Ds	Tc	0	2,430	dry	P
	0	4-15-53	Inc.										196	
	0	4- 2-52											151	
	0	8- 8-48											128	
	0	2-10-33			474									
	W-1900085													
20B3	GS	4-26-63	Lancaster Ranches	1961	680	R 14	T	100	Ir	Tap	1.0	2,426	266.13	L,P
			Inc.											
20D1	GS	4-26-63	Lancaster Ranches	1935	596	16	T	75	Ir	Hpb	.7	2,440	(a)	P,W
	W-1900084		Inc.											

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level	Depth below lsd (feet)	Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use					

T. 8 N., R. 13 W.--Continued

8/13-20H1	GS 0 DWR DWR FC-111123 W-1900065	5- 1-63 1957 11-11-54 11-25-53	Ben Sugimoto	1950	505	12	T 75 Ir	Bpb 0.4	2,425	a255.6 180 194.3 172.0		C,P
20K1	GS W-1900082	4-26-63	Lancaster Ranches Inc.	1946	603	R 16	T 100 Ir		2,428	(c)		P,W
20M1	GS FC-111113 W-1900083	4-26-63	Lancaster Ranches Inc.	1944	601	16	T 100 Ir	Tap .2	2,437	(a)		P,W
21B1	GS W-1900101	4-23-63		1948	400	12	T 50 Un	Bpb 0	2,410	(d)		L
21B2	GS	4-23-63					T N Un		2,407	(c)		
21C1	GS	4-23-63	John Urrea	1923	0		N N Ds					
21E1	GS W-1900119	5- 1-63	Manuel Beltran	1948	500	R 12	T 75 Ir	Tap 1.0	2,418	246.40		L,P
21F1	GS	4-24-63	John Urrea				T 75 Ir	Hpb 1.0	2,412	(b)		
21G1	GS	5- 1-63	R. B. Pipkin		478.5	12	N N Un	Tc .5	2,410	222.5		W

21J1	GS D	5- 1-63 1-28-59	Ben Nishimoto	1959	618	R 16	Ir		2,400	(j) 175	L,P
21K1	GS 0 W-1901012	5- 1-63 2- -57	R. B. Pipkin	1952	557	14	T 100	Ir	2,410	(c) 180	P
21P1	GS 0 0	5- 1-63 1960 1921	W. M. Mc Farlin	1921	336 500	10½	S 1½	Dm	2,409	a227 230	
21R1	GS	5- 2-63	N. R. Willerford		298	9	S 3	Dm	2,395	f147	
21R2	GS	5- 2-63	N. R. Willerford		127	12		Un	2,395	ch127	
21Z1	GS 0 W-1901044	5- 1-63 2-27-57	Ben Nishimoto		410	14		Un	2,401	180	P
22D1	GS 0 SCE W-1901045	5- 1-63 4- 6-54 4- 6-54	J. M. Nishimoto	1951	530	12		Ir	2,400	180 b198.87	P
22K1	GS FC-11153 W-1900678	3-20-63	Tullos Ranch	1930	480	C 16	N N	Un	2,383.5	e182.10	C,P,W
22K2	GS D	3-20-63 12-27-62	Tullos Ranch	1962	573	R 14	T 75	Ir	2,385	(c b) 201	L,P
22R1	GS	5-22-63			34.2	6		Ds	2,371	dry	

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use			Depth below lsd (feet)		

T. 8 N., R. 13 W.--Continued

8/13-23E1	GS D FC-111162	3-21-63 1928	O. G. Andrew and Son	1928	529 2,063	C 14	N N	Un T	Bhc 2.0	2,382	176.57		L
23M1	GS 0 FC-111163 W-1900677	3-20-63 1961	Tullos Ranch	1924	450	p8 12	T 40	Un		2,376	(c)		C,P,W
23M2	GS	3-20-63	Tullos Ranch		114.5	10	N N	Un	Tcc .5	2,376	113.96		
23M3	GS DWR	3-20-63 4-10-63	Tullos Ranch	1962	489	R 14	T 100	Ir	Tap .5	2,377	188.00 181.0		L,P
24J1	GS	5-22-63	Sturm	1915	500	C 8	T 10	Ir		2,337	(b)		
24L1	GS	5-22-63			0	6	N N	Ds		2,339			
24N1	GS	5-24-63			0		L N	Ds		2,344			
24Q1	GS	5-22-63			160	6	J 1	Dm		2,335	(c)		
25J1	GS	5-27-63	J. J. Wilson	1957	250		T 1½	Dm	Tap .3	2,330	57.60		
25J2	GS	5-27-63					T 1	Dm		2,330	(c)		
25J3	GS	5-28-63				6	N N	Un	Tc .8	2,330	57.62		

25K1	GS	5-24-63	Flus				Dm		2,333	(j)	
26D1	GS	5-23-63					Un	Tc	2,360	131.48	W
	GS	12- 5-51	H. G. Hurley	1948	385	R 12	Ir	Tc		77.94	
26J1	GS	5-24-63				8	Dm	Tc	2,342	66.00	
26K1	GS	5-23-63					Dm		2,348	(j)	
26M1	GS	5-23-63				6	Dm		2,357		
	FC	11-13-52								53.1	
	GS	12- 5-51	O. S. Toulouse	1916		6	Ir			40.2	
	FC-11164	12- 8-48						Bpb 0			
27A1	GS	5-23-63				12	T 10	Un	2,365	(c)	
27J1	GS	5-23-63				8	T N	Un	2,359	78.87	
28P1	GS	5- 3-63	Art Tufftee	1952	157	R 6	Dm	Tc	2,380	87.85	
28R1	GS	5- 2-63	W. G. Hiles	1952	201	R 6	L 1½	Dm	2,373	f110	L
	D	2-21-52								60	
	FC-11145										
29B1	GS	5- 2-63	Land Projects	1948	500	R 12	T 40	Ps	2,412	198.50	L,P
	SCE	8-29-57	Mutual Water Co.					Hpb		122.7	
	SCE	8-29-57								b188.1	
	D	1948								148	
	FC-11123A										
	W-1901519										

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use			Depth below lsd (feet)		

T. 8 N., R. 13 W.--Continued

8/13-29M1	GS SCE SCE SCE FC-111114 W-1901520	5- 2-63 10- 3-62 8-29-57 8-29-57	Land Projects Mutual Water Co.	1953	500	R 12	T 40	Ps	Tap	0.5	2,418	(b) 248.5 231.1 247.5	L,P
29M2	GS	5- 2-63	Land Projects Mutual Water Co.			12	N N	Un	Bhc	1.0	2,418	e233.74	
29M3	GS	5- 1-63			157.0	12	N N	Ds	Tc	1.0	2,421	dry	
30A1	GS FC-111103A W-1901518	5- 2-63	Land Projects Mutual Water Co.	1947	607	R 14	T 40	Ps	Tap	0	2,436	b268.70	L,P
30A2	GS FC-111113B	5- 2-63 12- 1-45			56.5	12	N N	Ds Ds	Tc	1.5	2,435	(c) dry	
30A3	GS FC-111113A	5- 2-63 12- 1-45			26	N 6		Ds Ds			2,435	dry	
30A4	GS FC-111103 DGT-164	5- 2-63 12- 1-45 10-13-21	Land Project Mutual Water Co.		75		N N	Ds			2,436	dry 64.7	W
30Z1	GS DGT-30	5- 2-63 1-16-20	Martin		314	8	N N	Ds	Tc	2.0	2,435	54.1	

31D1	GS	5- 3-63	D. Reca	1961	826	R 14	T 100	Ir	Tap	2.0	2,435	(i)	L,P
	W-1902770												
31M1	GS	5- 3-63	D. Reca	1948	700	R 14	T G	Ir			2,440	(b)	P
	W-1900549												
31N1	GS	5- 3-63	D. Reca	1954	785	R 14	T 300	Ir	Tap	0	2,450	(b)	L,P
	SCE	1957										206	
	SCE	1957										b243	
	D	12- 7-54										194	
	W-1900550												
31Q1	GS	5- 3-63	C. C. Sherri	1948	655	R 14	T 100	Ir			2,440	(b)	P
	W-1900971												
31R1	GS	5- 3-63	C. C. Sherri	1930	452	R 14	T 15	Ir	Hpb	.5	2,434	(a b d)	L,P
	W-1900970												
32D1	GS	5- 8-63	John Calandri	1953	600		T 100	Ir			2,415	(c)	P
32D2	GS	5- 8-63	John Calandri		28.0	14	N N	Ds	Tc	2.0	2,416	dry	
32G1	GS	5- 8-63	John Calandri	1923	1.0	14	N N	Ds	Tc	.5	2,405		L,P
	D	4-26-23			451				Tc	.5		41.5	
	FC-11115												
32G2	GS	5- 8-63	John Calandri	1945	600	14	T 75	Ir	Tc	0	2,405	ds182	
	O	5- 8-63										280	
32G3	GS	5- 8-63	John Calandri		1.0	6	N N	Ds	Tc	0	2,405		
32J1	GS	5- 8-63	Doris Krueger				T 50	Ir			2,404	(b c)	
32J2	GS	5- 8-63	Doris Krueger			9	S	7 $\frac{1}{2}$ Dm	Tc	.8	2,403	(c)	
	P	5- 6-63										167.2	

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter and (in.)	Pump type and power	Use			Depth below lsd: (feet)		

T. 8 N., R. 13 W.--Continued

8/13-32N1	GS D FC-11116	5- 8-63 7-31-45	Pedro Lizarraga	1945	262.0 570	R 16	N N	Un	Tc 0	2,426	ds217.90 143	L,P,W
32N2	GS W-1900128	5- 8-63	Pedro Lizarraga	1947	603	R 14	T 125	Ir	Bhc 0	2,425	ds180.95	C,P,W
32Q1	GS	5- 8-63	H Krueger				T 60	Ir		2,412	(b c)	
33G1	GS D FC-11135	5- 8-63 11-24-16		1916	0 401	N	N N	Ds		2,385	25	L
33K1	GS	5- 8-63	D. Morengo			16	T 50	Ir	Bhc .7	2,383	(a)	
33L1	GS D	5- 8-63 7-18-62	Kyne Ranch	1962	450	R 12	T 40	Ir		2,390	(c)	L,P
33M1	GS O W-1900780	5- 8-63 7- -62	A. J. Barnard	1926	450	12	T 50	Ir	Bpb 1.5	2,400	(b i) 278.5	P
33Q1	GS FC-11136	5- 8-63	J. D. Morengo		0	N	N N	Ds		2,387		W
33Q2	GS FC-11136A	5- 8-63	J. D. Morengo		0	N	N N	Ds		2,387		W

33Q3	GS FC-11136B	5- 8-63	J. D. Morengo		14	T	50	Ir	Hpb	2.1	2,387	167.45	C,W
33R1	GS	5-10-63	Westside Union School Dist.	1927	180	8	T	3	Dm		2,376	(c)	
34M1	GS	5-28-63	J. A. Hall			R 8	S E	Dm	Tc	.5	2,369		
34M2	GS	5-28-63	L. Drake	1955	100	6	J	1	Dm		2,366		
34N1	GS	5-28-63	J. Lycan	1961	208		S E	Dm			2,372	(b)	
34N2	GS	5-28-63	J. Lycan			6	N N	Un	Tc	1.5	2,372	(a)	
34N3	GS	5-28-63	E. C. O'Neil	1955	235	6	S	$\frac{1}{2}$	Dm	Tc	2,367	71.95	
<u>T. 8 N., R. 14 W.</u>													
8/14- 1A1	GS SCE SCE W-1900553	4- 9-63 8- -51 8- -51	W. H. Purdy	1955	500	R 12	N N	Un			2,468	180 b200	P
1B1	GS 0 W-1900811	3-29-63 1934	Rein Hakker	g1934	382.0 440	R 12	N N	Un	Tc	-.2	2,475	ds236.57	P
1B2	GS 0	3-29-63 3- -62	Rein Hakker	1962	678 850	R 14	T D	Ir T	Tap	0	2,475	(b)	P
1C1	GS W-1900810	3-29-63	Rein Hakker	1952	584	R 14	T G	Ir			2,480	fb315	P

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data				Measuring point	Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power			Depth below lsd (feet)		

T. 8 N., R. 14 W.--Continued

8/14-1H1	GS	3-28-63	Philip Carpe	1957	482	14	T 75	Ir	2,465	(b)		L
1K1	GS SCE SCE W-1900684	3-29-63 1955 1953	John Urrea	1948	355	R 12	N N	Un	2,474	ds226.95 b282 b256		P
1K2	GS	3-29-63	John Urrea	1961	602	R 12	T 100	Ir	2,474	(i)		L,P
1L1	GS	3-28-63	Clearwater Ranch		701	R 14	T 100	Ir	2,480	a269.5		P
1W1	GS 0 FC-12379C W-1900696	3-28-63 1- -48	Clearwater Ranch	1948	551 617	R 14	T 125	Ir	2,486	(b)		P
1R1	GS W-1900552	3-28-63	Philip Carpe	1947	504	R 12	T 75	Ir	2,470	(b)		P
2J1	GS SCE SCE W-1901187	4-10-63 8-24-60 8-24-60	T. H Smyth		380	12	T 75	Ir	2,492	(b) 298 321.6		P
2P1	GS FC-12369	4-10-63 9-20-40	T. H. Smyth		93.0 140	18	N N	Ds	2,500		dry dry	

2Q1	GS W-1901188	4-10-63	T. H. Smyth	332.8	16	N N	Un	Bhc	-.25	2,497	e307.58	P,W
2Q2	GS W-1901186	4-10-63	T. H. Smyth	702	14	T 125	Ir	Tc	.5	2,500	(b)	P,W
2R1	GS FC-12379A	4-10-63	T. H. Smyth		N	N N	Ds			2,494		W
2R2	GS	5-16-55	T. H. Smyth	77.8	14	N N	Ds	Tc	.5	2,487	dry	
5E1	GS	6-28-63	Alesso Farms	600	R 14	T 125	Ir			2,579	(c)	P
5H1	GS	2-19-63	Alesso Farms	706	R 14	T 125	Ir	Tap	1.0	2,561	179.72	P
6A1	GS FC-12308	6-28-62 1- 9-43		0 86	N N 10	N N	Ds Ds			2,590	dry	
6C1	GS HRJ-9	6-28-63 1908		135.5 190	3 5	N N	Ds Un	Tc	2.0	2,596	dry 138	
8B1	GS	2-19-63	Ritter and Godde	1,036	R 16	T D	Ir			2,565	(b)	L,P
10C1	GS FC-12349	2-19-63 9-20-40		108.7 116	6	N N	Ds	Tc	2.0	2,528	dry dry	
11A1	GS	4-9-63	J. S. Richards	262.0	R 6	N N	Ds	Tc	0	2,490	dry	
11G1	GS DMR FC-12369A	4-9-63 1953	J. S. Richards	512	R 14	T 60	Ir			2,500	(b) 190	C,P

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level	Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use			Depth below lsd: (feet)	

T. 8 N., R. 14 W.--Continued

8/14-12A1	GS FC-12389	4-10-63	Vista Verde Ranch					N N	Ds	2,470	(c h)	P, W
12B1	GS O	4-10-63 4-10-63	Vista Verde Ranch		540	R 14	T 100		Ir	2,473	(b) b410	
12C1	GS	4-10-63	Vista Verde Ranch		653	R	T 60		Ir	2,480	(b)	
12C2	GS	4-10-63	Vista Verde Ranch	1958		375.0 R 14	N N		Un	2,483	(i)	
12D1	GS FC-12379	4-10-63	Vista Verde Ranch	1933	294.0	14	N N		Un	2,482	ds212.50	W
12D2	GS P FC-12379D	4-10-63	Vista Verde Ranch	1955	704	R 14	T 40		Ir	2,486	(b) b328	L
12D3	GS FC-12379B	4-10-63	Vista Verde Ranch		371.0	16	N N		Un	2,489	308.37	
12M1	GS D	4-10-63	Vista Verde Ranch		0 90	R	N N		Ds	2,484		
13C1	GS W-1900643	4-24-63	W. M. Black	1936	390	12	T 60		Ir	2,479	247.95	P, W

13G1	CS	4-23-63	Peter Zaro	1950	485	R 14	T 60	Ir	Bhc	.3	2,474	(b)	L,P
	0	1956										259.7	
	0	1955										247.7	
	0	1953										229.7	
	0	1951										209.7	
	W-1900645												
13H1	CS	4-24-63	Peter Zaro	1963	527	R 14	T 100	Ir			2,467	b300	L,P
13N1	CS	4-24-63	Eliopulos Bros.	1946	503	14	T 125	Ir			2,487	(b)	P
	SCE	1955										205	
	SCE	1955										b227	
	W-1900864												
13P1	CS	4-24-63	Eliopulos Bros.	1955	608	14	T 150	Ir			2,475	(b)	P
	W-1900862												
14B1	CS	3-28-63	Mechanical Feeders			12	N N	Un	Tc	.9	2,491	230.15	
14E1	CS	3-28-63	Del Combs	1961		N	N N	Ds					
14F1	CS	3-28-63	Del Combs	1961	402	R 14	T 60	Ir			2,505	(b)	L,P
14G1	CS	3-28-63	Mechanical Feeders				T 60	Ir			2,495	(b c)	
14J1	CS	3-28-63	Mechanical Feeders	1950	450	R 14	T 125	Ir			2,488	(b)	L,P
	FC-11072B												
	W-1902781												
14N1	GS	5-10-62					N N	Ds			2,511		L
	DGT-26	8- -18	R. A. George	1918	252	8			Tc	1.0		89	
	FC-11062												
14R1	GS	3-29-63	Mechanical Feeders			16	N N	Un	Tc	1.0	2,494	225.80	W
	FC-11072												

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth :(feet):	Type, diam- eter (in.)	Pump type and power	Use			Depth below lsd (feet)		

T. 8 N., R. 14 W.--Continued

8/14-15B1	GS	5-10-62	Three Wells Ranch	1955	418	R 14	T 100	Ir	Tap	0	2,520	b215	L,P
15G1	GS W-1900411	5-10-62	Three Wells Ranch	1953	469	R 14	T 125	Ir	Tap	0	2,525	(b)	L,P,W
15G2	GS 0 0 W-1900412	5-10-62 12- -56 11- -55	Three Wells Ranch	1955	421	R 14	T 150	Ir	Tap	0	2,521	(b) 189.0 185.0	L,P
17M1	GS	5- 8-62	M. C. King	1958	828	R 14	N N	Un	Tc	1.0	2,592	172.50	L,P
17P1	GS	6-29-62					N N	Ds			2,602		
17Q1	GS SCS-8 FC-11012	5- 7-62	M. C. King	1943	200	8	N N	Un	Tc	1.5	2,588.5	155.17	W
18W1	GS FC-10982B W-1901097	5- 7-62	M. C. King	1954	865	R 16	T 150	Ir	Tc	.2	2,642	(b)	C,L,P,W
20P1	GS	4-16-62			7.5	10	N N	Ds	Tc	.5	2,605	dry	
20P2	GS	4-17-63	Owen Pete	1963	30	R 8	L N	Un	Tc	1.3	2,610	15.85	
20Q1	GS	4- 9-63 4-16-62				Dg N	N N	Ds				17.87	

23A1	GS	3-28-63	Mechanical Feeders	325	R 14	N N	Un	Tc	.5	2,488	254.80 133.7	C,P
	FC-11072A W-1900114	3-12-45										
23B1	GS	3-28-63	Mechanical Feeders	378	16	N N	Un	Tcc	0	2,502	247.40	P
	W-1900115											
23B2	GS	3-28-63	Mechanical Feeders			N N	Un			2,500	(c,h)	
23G1	GS	3-28-63	Mechanical Feeders	420	14	T 75	Ir			2,500	(b)	P
	W-1900116											
23G2	GS	3-28-63	Mechanical Feeders	396	R 14	N N	Un	Tc	1.5	2,498	a244.5	L,P
23K1	GS D	4-25-63 2-16-55	Mechanical Feeders	347	R 8	T 7½	Dm			2,496	192	
24A1	GS	4-25-63			6	N N	Un	Tc	.25	2,462	(c)	W
	DGT-163 FC-11092											
24C1	GS	4-24-63	George Gregg	618	R 14	T 75	Ir	Tap	1.0	2,475	(b)	P
	W-1901585											
24D1	GS	4-24-63	George Gregg	300	R 14	S E	Dm			2,490	(c)	P
	W-1901584											
24E1	GS	4-24-63	George Gregg	436	R 14	T 100	Ir	Tap	1.0	2,480	(b)	L,P
24K1	GS	4-25-63	John Calandri	522	R 16	T 60	Ir	Hpb	.3	2,472	(b)	
	O	1954									200	
	O	1946									118	
	W-1901010											
24M1	GS	4-24-63	George Gregg	333	R 14	T 150	Ir	Tap	1.0	2,485	(b)	L,P
	W-1901586											

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use			level	Depth below lsd (feet)	

T. 8 N., R. 14 W.--Continued

8/14-24Q1	GS	4-25-63	John Calandri		246.0	16	N N	Un	Tc 1.0	2,475	ds217		
24Z1	GS	4-25-63	George Gregg				N N	Ds		2,474			
HRJ-38		1908	Handinger			Dg 48		Un			80		
25A1	GS	4-24-63	George Gregg	1960	496	R 14	T 150	Ir		2,455	(b)		L, P
25C1	GS	4-24-63	George Gregg		0		N N	Ds		2,476			
FC		11-14-45			145				Hpb 0			dry	
FC-11083		3-12-45											
25C2	GS	4-24-63	George Gregg		76.0	10	N N	Ds	Tc 0	2,476	dry		W
FC-11083A													
25D1	GS	4-24-63	George Gregg			R 16	N N	Un	Tc 2.0	2,483	246.76		W
FC-11073													
25H1	GS	4-24-63	George Gregg		425	14	T 125	Ir	Tap 1.0	2,456	(b)		W
25L1	GS	4-24-63	George Gregg		276.0	16	N N	Ds	Tc 0	2,485	dry		
26Z1	GS	4-24-63					N N	Ds		2,496			
HRJ-39		1- -09	Charles Smith	1886	140	B 7					120		
30H1	GS	4- 9-63	Mrs. L.E. Northrop	1960	179	R 6	L W	Dm	Tap 0	2,675	b 18.82		L
D		1-26-60									16		

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use			level	Depth below lsd (feet)	

T. 8 N., R. 15 W.--Continued

8/15-7N1	GS FC-10881	4-11-62	James Woo	1955	653	R 14	T 75	Ir	Tap 0	2,763	(b)		L,W,P
7N2	GS	4-11-62	James Woo			14	L 3/4	Dm		2,765			
7P1	GS FC-10881A W-1900655	4-11-62	James Woo	1959	750	R 14	T 150	Ir	Tap .5	2,750	175.10		P,W
10C1	GS Scott 10-1	4- 5-62 9-24-50	Chester W Scott Staiger & Freeman	1950	0 3,050	N 12	N N	Ds T		2,657			
10G1	GS FC FC-10940A	5- 4-62 11- 5-58 10- 7-58	W. McDonald	1957	295	10	T 25?	Ir	Hpb .5	2,685.3	158.20 153.5 199.7		
10P1	GS FC-10940	5- 3-62	Chester W. Scott		203	12	T 3	Dm	Tcc .83	2,712	bl63.30		C,P,W
13J1	GS Singer 1	5- 8-62 10-10-50	W. L. Larson Solar Oil Co. Inc.	1950	200 2,090		N N	Un T		2,445	(h)		
17R1	GS FC-10912 SCS-7	5- 3-62			138.1	14	N N	Ds		2,800	dry		W

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter and (in.)	Pump type and power	Use			Depth below lsd (feet)	Depth below lsd (feet)	

T. 8 N., R. 15 W.--Continued

8/15-24B2	GS FC-10982A W-1901075	5- 8-62	W. L. Larson	1946	252	10	T 15	Ir		2,669			C,P,W
24B3	GS	5- 7-62	W. L. Larson	1956	700	R 14	N N	Un	Tc 0.5	2,679	141.90		P,W
27H1	GS	5- 2-62				N	N N	Ds		2,790			
27R1	GS FC-10955 SCS-2	4-16-62	I. T. Brandt		220.0		N N	Un	Tc .33	2,806.8	166.00		W
29M1	GS FC-10895	4-16-62	U.S. Soil Cons. Service	1944	45.5	6	N N	Ds	Tc 2.0	3,017	dry		L,W
31Q1	GS	4-12-62	A. E. Skelton	1961	n3,140	R 10	N N	Un	Tcc 2.2	3,270	66.40		P
32E1	GS	4-12-62	Henry Fuller	1947	170	C 8	L W	Dm	Tc .75	3,155	122.10		W
32L1	GS 0	4-12-62 10- -44	Henry Fuller	1944	149.0 n250	R 8	N N	Ds		3,073	dry		
32L2	GS 0	4-21-62 10- -44	Henry Fuller	1944	0 n187	N 6	N N	Ds		3,082	dry		L
33F1	GS FC-10926B	4-16-62 12- 2-58	Fairmont Farms	1955	801	R 16	T 100	Ir	Tap .5	2,946	b372 269.1		C,P,L

33G1	GS FC-10926 SCS-3	4-16-62	Fairmont Farms	1952	475	281.5	12	J	3	Dm	Tcc	1.23	2,930	e258.47	C,W
33G2	GS DWR FC-10926A	4-16-62 11-19-53	Fairmont Farms	1952	475	281.5	14	T	75	Ir	Tap Bhc	2.0 0	2,935	269.66 238.8	C,P
34G1	GS FC-10945	4- 6-62		1947	320	320	R	10	L	W	Tap	0	2,860	214.3	L,W
34K1	GS DWR	4-19-62 10-23-57	R. B. Mentel				10	L	W	Un	Tc	.3	2,875	238.97 276.7	
35R1	GS	4-18-62	T. W. McIvers	1890	97.5	97.5	8	N	N	Ds	Tc	0	2,900	dry	
36M1	GS FC-10976	4-12-62	A. E. Skelton		290	290	8	L	W	Dm	Tcc	1.15	2,885.5	92.15	C,W
36M2	GS HRJ-11	4-19-62 1908	Healy Ranch A. A. Ullman		137.3 210	137.3	4	N	N	Un Dm	Tc	.8	2,790	106.53	
36N1	GS M	4-19-62 1936	Healy Ranch Daisy Duhart (No. 1)	1936	237.2 n2,050	237.2	12	N	N	Un	Tc	1.3	2,805	114.88	
8/16-1P1	GS M	4- 3-62 1-17-57	W. J. Stava Gorrindo No. 1	1957	0 1,315	0	N	N	N	Ds T			2,770		
4N1	GS	4- 4-62	John Fuson		1,000	1,000	R	14	T	125	Ir	0	2,878	226.20	P

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth (feet)	Type, Pump diam- eter (in.)	type and power	Use			Depth below lsd: (feet)		

T. 8 N., R. 16 W.--Continued

8/16-5C1	GS FC-12098	4- 2-62	John Fuson		1,000	R 14	T 125	Ir	Tc 0.5	2,900	212.73		P
5M1	GS FC-12099A	4- 2-62 10- 7-57	Mettler & Bury No.12		1,001	R 14	T 125	Ir	Tc 1.0	2,903	234.44 270.9		L,P
5N1	GS FC-12099	4- 3-62	Mettler & Bury	1919	224.5	12 N N		Ds	Tc 4.5	2,900	dry		W
6D1	GS	4- 2-62	Mettler & Bury No.11		1,002	R 14	T 125	Ir		2,929	(c)		L,P
6G1	GS	4- 2-62	Mettler & Bury No.10		1,007	R 14	T 125	Ir	Tc 1.0	2,915	229.31		L,P,W
6M1	GS	4- 2-62	Mettler & Bury No.1		600	R 12	T 100	Ir	Tc 1.0	2,927	238.77		L,P,W
6Q1	GS DWR DWR DWR D	4- 2-62 12-18-56 10- 2-56 1955 11-27-51	Mettler & Bury No.2	1951	612	R 12	T 100	Ir	Tc 1.0	2,918	(i) 237.9 ml47 196 196		C,L,P
6Q2	GS HRJ-2 DGT-24 FC-12089	4- 2-62 Jan. 1909	Mettler & Bury W. M. Fisher		0	8 N N D 8		Ds Un		2,918	94		
		3- 9-45			302				Tcc 1.5	207.3			

7E1	GS	3-29-62	Mettler & Bury No.4	1952	1,006	R 12	T 100	Ir	2,953	(i)	P
7G1	GS	4- 2-62	Mettler & Bury No.6	1953	1,002	R 12	T 125	Ir	2,945	(i)	L,P
7N1	GS	3-29-62	Mettler & Bury No.5		1,004	R 12	T 125	Ir	2,997	337.90	L,P
8G1	GS	4- 3-62	Mettler & Bury No.8		1,004	R 14	T 125	Ir	2,910	(b)	L,P,W
8J1	GS	4- 3-62	Mettler & Bury No.13	1956	1,002	R 14	T 125	Ir	2,943	(i)	L,P
8Q1	GS	4- 3-62	Mettler & Bury No.9		1,006	R 14	T 125	Ir	2,950	(b)	L,P
	DWR	3-10-58							325.2		
	DWR	11-15-57							335.7		
	DWR	10- 2-56							263.0		
10E1	GS	4- 4-62		1894		4.0 Dg N	N N	Ds	2,882		
	HRJ-4	1909	O Caldwell		200			Un	200		
	DGT-25										
12N1	GS	4-11-62	Lazaro Gorrindo	1956	500	8	S E	Dm	2,800	(i)	
12N2	GS	4-11-62	Lazaro Gorrindo		174.0	8	N N	Un	2,800	al72	
	DWR	6-22-56							166.34		
13N1	GS	4-11-62	Benjamin Bunting	1952	425	R 8	S 1	Dm	2,838	58.60	
	DWR	6- -55							40		
13P1	GS	4-11-62			0	N	N N	Ds	2,522		
	HRJ-7	1909	Arnold		150			Un			
14K1	GS	4-11-62	Eldon Snyder		0	N	N N	Ds	2,855		C,P,W
	FC-10851A	1946			123						
	HRJ-6	1909	Tom W. Gentry		150	6	L W	Dm	110		

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring:		Altitude of lsd (feet)	Water		Other data
				Year com- pleted	Depth :(feet):	Type, diam- eter :(in.):	Pump type and power	Use	point	:		level	Depth below lsd: :(feet):	

T. 8 N., R. 16 W.--Continued

8/16-14L1	GS FC-10851 SCS-1	4-11-62	Eldon Snyder	1945	195	10	S	1	Dm	Tc	1.0	2,859	153.02	C,W
14L2	GS	4-11-62	Eldon Snyder	1960	197.0	C	10	L	N	Un	Tc	2,865	133.05	W
15N1	GS	4- 4-62	E. H. Bittick		265	8	L	E		Dm	Tap	2,970	45.73	W
15N2	GS	4- 4-62	E. H. Bittick		46.0	Dg	8	L	N	Un	Tc	2,970	40.25	
	DWR	3-17-59											39.4	
	DWR	6-22-56											37.4	
	HRJ-5	1909	Southern Pacific	1895	60					Un			40	
15N3	GS	4- 4-62	E. H. Bittick		100.8	10	N	N		Un	Hpb Bhc	2,970	73.00	
	DWR	6-22-56											88.5	
16P1	GS	4- 4-62	Monarch Investment Co.	1961,	279	R	6	S	2	Dm	Tcc	3,039	b145.83	
17N1	GS	4- 4-62	E. B. Hougham			12	S	N		Un	Tc	3,042	129.12	
17P1	GS	4- 4-62	Monarch Investment Co.	1948	860	10	N	N		Un	Bhc	3,051	135.96	P
FC-10802B														
17R1	GS	4- 4-62	Monarch Investment Co.	1947	846	R	18	T	60	Un	Tc	3,052	126.11	
	DWR	11-12-54											169.30	
	DWR	5-10-47											76.35	
	DWR	2- -47											69.0	
FC-10802														

17R2	GS FC-10802A	4- 4-62 5-10-47	Monarch Investment Co.	1947		R 18	T 125	Un	Bhc Tc	.85 1.0	3,053	149.45 71.1	C
18E1	GS FC FC-10771	4- 5-62 11-29-54 12-30-53	Mettler & Bury	1948	540	R 12	N N	Un	Tc	0	3,029	336.76 203.3 255.45	L
18H1	GS FC-10791	4- 4-62	Neenach School	1922	250	8	L 1	Dm			2,995	(c)	C,P,W
18H2	GS GS FC-10791A	4- 4-62 1950	Roy Barns	1961 1950	g400 183	C 10	S 20	Dm	Tcc	2.0	2,987	135.10	W
18H3	GS HRJ-3	4- 4-62 1909	Roy Barns Neenach School	1898	0 210	N	N N	Ds Un			2,989	200	
20A1	GS DWR	4- 9-62 6-20-56	Gordon Erstead	1945	211			Dm	Tc	1.0	3,060	88	
20K1	GS FC-10803	4- 9-62 2- -47	Ben Hoffman	1947	1,080	N R 16	N N	Ds			3,145	92.0	
20K2	GS	4- 9-62	M. M. Tener		81.5	C 12	N N	Un	Tc	0	3,175	37.39	
22E1	GS DWR	4-10-62 6-20-56	Viola Cherbonno Viola Gookins	1942		12	N N	Ds	Tc	1.0	3,032	51	
22M1	GS DWR	4-10-62 12-24-57	Viola Cherbonno Viola Gookins	1938	80	C 8	L W	Dm	Tcc	1.0	3,042	b24.82 73	
22Q3	GS DWR	4- 9-62 4- -53	T. R. Mollinet	1953	54.75	C 10	N N	Un	Tc	3.25	3,049	34.09 61.75	L

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Year com- pleted	Well data				Measuring point (feet)	Altitude of lsd (feet)	Water level		Other data
					Depth (feet)	Type, diam- eter (in.)	Pump type and power	Depth below lsd (feet)					

T. 8 N., R. 16 W.--Continued

8/16-22Q4	GS	4-10-62	T. R. Mollinet	1954	152	C	8 L G	Dm	Tc	0.3	3,049	35.04	L,P,W
23G1	GS	4-11-62	Hadfield		106.0		8 L W	Un	Tc	.3	2,913	84.79	W
23Q1	GS DWR	4-10-62 6-29-56	H. H. Easton	1943	147		8 L W	Dm	Tc	.2	2,967	f74.8 77.7	
24K1	GS DWR DWR DWR	4-12-62 11-12-59 11-12-57 10-24-57	Francis Frakes	1955	180		6 S E	Dm			2,870	(i) 167.4 177.9 206.9	
25B1	GS	4-12-62	Harriso		250		T	2 Un	Tc	.1	2,955	(c)	
25P1	GS	4-12-62	Action Ranch				5½ L H	Un			3,125	(c)	
26G1	GS	4-10-62	Harry Mannell		17.4		12 L W	Un	Tc	3.0	3,080	1.87	W
26G2	GS DWR DWR	4-10-62 10-17-61 6-29-56	Harry Mannell		.1	Dg	42 N N	Ds	Tc	4.9	3,085	dry 5.5 2.1	
26G3	GS DWR	4-10-62 6-29-56	Harry Mannell		90		7 L W	Dm	Tcc	1.6	3,050	25.97 29.0	
26M1	GS	4-10-62	Tona		4.7	Dg	36 N N	Un	Tc	1.9	3,200	.21	

27A1	GS DWR DWR DWR	4- 9-62 3-13-58 11-12-57 6-20-56	Irving Harris	1935	52+	C 10	L N	Un	Tc	0	3,045	38.60 61.8 65.8 66.8
27A2	GS DWR	4- 9-62 10-24-51	Irving Harris	1950	52+	C 10	L N	Un	Tcc	3.0	3,045	30.42 41
27A3	GS D	4-10-62	Irving Harris		0 300	R 8		Ds			3,165	P
28F1	GS	4-10-62	H. W. Hunter		400	C 12	N N	Un	Tcc	0	3,250	35.90
28F1	GS DWR	4-10-62 6-20-56	H. W. Hunter	1917	33	Dg36	S 1	S	Tcc	.15	3,165	8.39 28.55
28L1	GS	4-10-62	H. W. Hunter			7	N N	Un	Tc	1.2	3,170	7.00
28P1	GS	4-10-62	H. W. Hunter			Dg60	J&L E	Dm	Tcc	-1.5	3,235	7.50
29B1	GS	4- 9-62	W. LeGuire		n138	C 8	L E	Dm			3,175	f90
32L1	GS FC-10796	4- 4-62	V. G. Cory	1927	119	12	L N	Un	Tc	2.0	3,418	71.05
32L2	GS FC-10806	4- 4-62 1946	V. G. Cory	1938	155	C 8	T 3	Dm	Tc	.3	3,412	(c) 86.7
32M1	GS	4- 4-62	A. F. Sullivan	1957	136	8	J	$\frac{1}{2}$ Dm	Tc	.6	3,405	b109.83
33F1	GS	4-10-62	H. W. Hunter	1961	46.0	C 10	N N	Un	Tc	1.0	3,325	1.68

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water		Other data	
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use			level	Depth below lsd: (feet)		
T. 8 N., R. 17 W.														
8/17-1N1	GS FC-12059	3-28-62 11-13-45	Tejon Ranch No. 64	1946	787	C 14	N N	Un	Tcc 0	2,955.5	251.51 199.6		L, P	
2N1	GS FC-12049A	3-29-62	Mettler & Bury	1948	1,000	R	T 150	Ir		2,987.5			C, L, P, W	
2Q1	GS DWR FC-12049B	3-29-62 11-12-59 11-29-48	Mettler & Bury	1948	1,019	R	T 150	Ir		2,968	(j) 275.0 214		L, P	
4D1	GS FC FC-12008	3-27-62 1951 11-29-48	Tejon Ranch	1955	530	12	N N	Un	Tcc 1.75	3,036	115.42 121.2 112.4		L	
10N1	GS O&G	3-29-62 10- 7-54	J. Q. Tannehill (Community No. 1)	1954	0 1,325	10	N N	Ds T		2,992				
11D1	GS FC-12049	3-29-62	Tejon Ranch No. 4	1945	484	C 14	N N	Un	Tc .5	2,993	285.34		L, W	
11E1	GS FC-10740	3-29-62	Tejon Ranch	1945	770	C 12	N N	Ds		3,000			C, P, W	
12E1	GS	4- 3-62	Mettler & Bury		0	Dg30	L N	Ds		2,971				

12G1	GS	3-28-62 12- -51	Mettler & Bury No.3	1951	994	R 12	T 100	Ir	Tc	0	2,958	(i) 215	C,L,P
13H1	GS	3-28-62	Mettler & Bury No.7	1953	1,087	R 12	T 125	Ir			3,040	(c)	P,L
14E1	GS FC-10741	3-29-62	P. M. Barnes	1919	64	C 10	L W	Un	Tc	2.0	3,045	44.55	W
14E2	GS FC FC FC-10741A HRJ-1	3-29-62 11-27-51 1- 4-50 12- 1-48 1909	P. O. Barnes	1893		8	N N	Ds	Tc	1.7	3,045	dry f/ dry 34.15 44.7 28.3	C,
14E3	GS DWR DWR DWR	3-29-62 10-18-61 3-10-58 11-13-57	P. O. Barnes		110	C 8	J 2	Dm	Tc	2.0	3,045	t44.00 58.3 62.5 62.4	
14Z1	GS O	3-29-62 1909	P. O. Barnes		0	Dg	N N	Ds			3,018	27	
16A1	GS M	4- 5-62 5- 1-54	J. Q. Tannehill No. 16-1		9.0	10	N N	Ds T	Tc	1.0	3,085	dry	
19K1	GS FC-10673	3-28-62	Tejon Ranch			Dg60	L N	Un	Tc	-7.0	3,325	(c)	
19L1	GS DWR	3-27-62 8-28-53	Bell Telephone Co.		88	10	J 3	Dm	Tc Tap	.9 2.0	3,385	63.12 69.8	
19L2	GS DWR	3-27-62 8-28-53	Kinsey Ranch		200	6	S E	Dm	Tap	.2	3,400	117.9	

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level	
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use			Depth below lsd (feet)	Other data

T. 8 N., R. 17 W.--Continued

8/17-19M1	GS	3-27-62	Kinsey Ranch		200	12	S	$\frac{1}{2}$ Dm	Tap	0.16	3,415	126.16
<u>T. 8 N., R. 18 W.</u>												
8/18-14A1	GS M	4- 5-62 9- -21	Tejon Ranch	1921	9.0 2,163			Un T	Ls	0	3,400	3.65 L
14J1	GS M M	4- 5-62 12- 4-57 9- 8-56	Kinsey Ranch Kinsey No.1	1956	5.0 R g3,754 2,107	N	N N	Ds T T			3,509	L
17J1	GS FC-10591	3-28-62	J. C. Ralph	1943	160	12	T	25 Ir	Bhc	- .5	3,430	60.59 P,W.
17Q1	GS	3-28-62	J. C. Ralph		34.6	12	N N	Un	Tc	1.4	3,405	33.50
17Q2	GS	3-28-62	J. C. Ralph	1953	150	12	J	3/4Un	Tc	1.7	3,385	13.52
21A1	GS	3-28-62	Kinsey Ranch		400	10	N N	Un	Tc	1.0	3,410	36.18
21R1	GS DWR	3-29-62 8-27-53	Kinsey Ranch		96	6	L W	S	Tc	1.0	3,220	31.02 27.3
22B1	GS FC-10622A	3-28-62	Kinsey Ranch		66	12	T	3 Un	Tc	.87	3,312	48.96 W
22B2	GS FC-10622	3-28-62	Kinsey Ranch		24.2	10	N N	Un	Tc	.8	3,321	19.36 W

23F1	GS FC-10642	3-27-62	Kinsey Ranch	1959	224	12	N N	Un	Tc	1.0	3,343	99.62	W
23G1	GS	3-27-62	Kinsey Ranch	1945	205	12	T 15	Ir			3,350	(c)	
23G2	GS DWR	3-27-62 8-27-53	Kinsey Ranch		83.5	12	N N	Un	Tap	2.0	3,350	17.53 12	
23L1	GS	3-27-62	Kinsey Ranch		0	N	N N	Ds			3,560		
23N1	GS	3-28-62	L. Tarne	1912	13.5Dg	36	N N	Un	Tc	1.5	3,625	6.46	
23N2	GS	3-28-62	L. Tarne	1912	13.2Dg	60	N N	Un	Tc	1.3	3,625	6.77	
23R1	GS	4- 9-62	Kinsey Ranch		150	8	N N	Un	Tc	1.0	3,640	5.17	
24H1	GS	3-27-62	Kinsey Ranch		100	12	L W	S	Tc	.5	3,340	b23.52	P,W
26D1	GS 0	3-28-62 1960	Glenn Tarne	1960	154	R 6	S 3/4	Dm			3,700	(c) 10	P
<u>T. 9 N., R. 12 W.</u>													
9/12-19C2	GS	4-26-63	J. Randleman	1953	330	R 14	T 40	Ir			2,366.8	(b)	P
19D1	GS GS	4-26-63 4-12-51	E. L. Thompson		250	R 12	T 25 T 20	Ir Ir	Tc	2.0	2,373.2	(b) f40	
30E1	GS	5- 9-63			97	6	N N	Ds	Tcc	.7	2,350	dry	W
31D1	GS	5- 9-63	Doheney				T 50	R	Tap	1.0	2,343.5	133.10	
31N1	GS	5- 9-63	Wagas Ranch		300	12	N N	Un	Tc	.5	2,347.2	114.42	W

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data				Measuring point	Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power			Use	Depth below lsd (feet)	
T. 9 N., R. 13 W.												
9/13-19C1	GS	3- 5-63			600		S 1 Dm	Tcc 0	2,463.9	244.70		
19C2	GS	3- 5-63	R. Willington		131.0	8	N N Ds	Tc 0	2,463.0	dry		
19D1	GS	3- 1-63	R. Willington		450	16	S 1½ Dm	Tc .7	2,464.8	238.00		
19F1	GS	3- 5-63	George Gowman			6	S N Un	Tc .5	2,451.1	235.54		
19M1	GS	3- 1-63				14	N N Un		2,460.7	(h c)		
20C1	GS	3- 5-63	Frank V. Collins		119.0	14	N N Ds	Tcc 1.0	2,445.8	dry		
	GS	2-10-53			124					dry		
	FC-12413	11- 7-41								95.8		
20C2	GS	3- 5-63	Frank V. Collins		250.5	R 12	N N Un	Tc .5	2,441.7	246.75	L,C	
	GS	2-10-53								f130.5		
	FC-12413A											
20C3	GS	3- 5-63	Frank V. Collins	1960	367	10	T 7½ Dm		2,435.7	(a)	C	
20H1	GS	3- 5-63		1920	350	12	S 2 Dm	Tc .1	2,416.5	228.72	P,W	
	DGT-157											
	CW9/13-20A											
	FC-12424											
20H2	GS	3-19-63	Albert Veldhuizen				S 2 S		2,414.4	(c)	W	
	FC-12424A											

20M1	GS HRJ-21	3- 5-63 1907	J. F. Glasgow	0 49	Dg Dg	N 48	N H	N 50	Ds		2,432.6	46	P
20Q1	GS DWR	3-19-63 4-14-60	Albert Veldhuizen	420	14	14	T	50	Ir	Hpb 2.0	2,414.2	(i) 200.9	P
21A1	GS	3- 6-63	L. R. Duntley		14	T	25	Un	Bhc 0		2,396.5	129.41	
21B1	GS	3- 6-63	L. R. Duntley	260	6	L	E	S	Tc .8		2,395.0	(c)	
21B2	GS	3- 6-63	L. R. Duntley	58.4	6	N	N	Ds	Tc .61		2,396.2	dry	
	CW-9/13-21A	12-5-29	S. P. Land Co.	92		L	W	Dm				39.89	
21B3	GS	3- 6-63	L. R. Duntley	111.0	12	N	N	Ds	Tc 1.0		2,396.4	dry	
	CW-9/13-21	12- 5-29		172				Ir					
21N1	GS	3- 5-63			R 12	N	N	Un	Tc 1.0		2,405.2	(c)	
22A1	GS	4-23-63	D. M. Hoagland	1946	252	14	S	3	Dm	Tcc 1.0	2,388.9	149.02	C,P
	0	2- 6-52										b119	
	0	1951										89	
22C1	GS	4-23-63		167.5	12	N	N	Un	Tc 1.0		2,396.4	126.69	C
	DWR	8- 9-60										159	
22F1	GS	4-23-63			14	N	N	Un	Tc 1.0		2,390	130.58	
22G1	GS	4-23-63	C. T. Thompson	260	6	J	1	Dm	Tc 1.0		2,384.4	132.0	
22H1	GS	4-23-63	D. M. Hoagland		8	N	N	Un	Tc 0		2,382.6	141.24	
22K1	GS	4-23-63	L. E. Crook		6	S	3/4	Dm			2,381.0	(c)	
22M1	GS	4-23-63	Thomas Crook	1955	200	R 8	T	3	Dm	Hpb 1.0	2,385.1	t107.82	

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring: point	Altitude of lsd (feet)	Water level	Depth below lsd: (feet)	Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use					

T. 9 N., R. 13 W.--Continued

9/13-22M2	GS	4-23-63	Valley Wilkinson	1955	250	R	6 S	2 Dm	Tap	1.0	2,384.8	106.2	
22N1	GS	4-23-63	M. Robson	1962	250		6 S	3 Dm	Tec	1.0	2,386.0	116.76	
22P1	GS	4-24-63				R	7 N N	Un	Tc	1.0	2,382.7	103.11	
22R1	GS	4-24-63			50		8 L N	Ds	Tc	1.0	2,378.0	dry	W
22R2	GS	4-23-63	Berry J. Smith		251	R	6 S	1½ Dm	Tap	1.0	2,375.6	bl07.14	L
22R3	GS	4-23-63	K. Paul				6 S E	Dm	Tec	1.0	2,376.6	106.62	
22R4	GS	4-24-63					8 T	5 Dm	Tc	1.0	2,375.2	104.98	
22R5	GS	4-26-63	M. E. Daniels	1963	280	R	6 S	3 Dm	Tap	1.0	2,375.2	114.21	
22R6	GS	4-24-63			250		6 S	2 Dm	Tc	1.0	2,375.3	120.14	
22Z1	GS	5- 8-63		1888	35	B	5 S	Ds			2,398	20	P
	HRJ-15B	1907						Dm					
22Z2	GS	5- 8-63	E. M. Hamilton	1888	35	D	5 L W	Ds			2,396.1	30	P
	HRJ-15a	1907						Dm					
23A1	GS	4-24-63	S. J. Coder	1947	300	R	14 T	40 Ir	Hpb	1.0	2,404.0	172.16	L
	FC-12473A												

23B1	GS FC-12473	4-24-63	DeMonte	1942	400	R 12	S E	Dm	Tc	0	2,399.6	176.34	L,W
23B2	GS GS FC-12473B	4-24-63 1-25-51	DeMonte	1954	300	R 10	T 50	Ir	Tap Bpb	1.0 0	2,398	166.62 110.53	C,L
23C1	GS	4-24-63					S 2	Dm	Tcc	0	2,395.6	169.02	
23C2	GS	4-24-63	Charles Julian			6	L G	Dm	Tc	1.0	2,389.9		
23C3	GS FC-12463A D	4-24-63 2- 6-52 1951	R W. Buehrle		254	12	S 1	Dm	Tap	.5	2,397.4	161.09 111.0 129	P
23E1	GS	4-24-63	James K. Bulter	1945	252	R 12	S 1½	Dm	Tc	1.0	2,381.8	142.61	C
23F1	GS	4-24-63	A. M. Jefferies	1958	220	6	S E	Dm	Tap	1.0	2,382.6	bl47.39	
23N1	GS	4-25-63				R 6	N N	Un	Tc	1.0	2,374.3	102 86	
23P1	GS	4-25-63	George Hill	1955	200	R 8	S 3/4	Dm			2,373.0	(c)	
23P2	GS	4-25-63	J. Calderon				J 1	Dm	Bpb	0	2,371.6	105.15	
23Z1	GS CW-9/13-23B 1929	5- 8-63	W. C Robbins			N	N N	Ds Ir			2,403.7	58	
24A1	GS FC-12493	4-25-63	Frank Guirido		250		T 30	Ir	Tc	1.0	2,384.2	(i)	
24A2	GS	4-25-63	Frank Guirido		380	14	T 50	Ir	Tap	.5	2,384.2	(b)	P

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data				Measuring		Altitude of lsd (feet)	Water		Other data
				Year com- pleted	Depth (feet)	Type, Pump diam- eter (in.)	Power	point	Use		level	Depth below lsd (feet)	

T. 9 N., R. 13 W.--Continued

9/13-24B1	GS	5- 8-63			63.3	7			Ds	Tc	0.08	2,392.0	dry
	CW	10-22-29										59.72	
CW-9/13-24A		10- 9-29	C. G. Spencer	1908	61		N N					60.92	
	HRJ-18	1908			56	7	H		Dm			32.92	
24C1	GS	4-25-63	Frank Binendo	1951	400	14	T	50	Ir	Tc	.5	2,397.3	169.44
	FC	12-30-53										128.8	
	FC-12483	2- 4-52										113.93	P
24D1	GS	4-25-63	A. V. Harvey		385	12	T	40	Ir	Hpb	.18	2,398.8	170.50
24J1	GS	5- 8-63				6	N N		Un	Tc	.5	2,362.1	120.92
24J2	GS	5- 8-63				6	N N		Un	Tc	.5	2,360.9	(i)
24K1	GS	5- 8-63			200		L W		Dm			2,365.0	(c)
CW-9/13-24B		10- 9-29	A. H. Jones		60		L W			Tc	.79	33.31	
24L1	GS	5- 8-63	Frank Binando		200	10			Un			2,368	(i)
24M1	GS	4-25-63			37.0	8	N N		Ds	Tc	1.0	2,372.2	dry
24N1	GS	4-24-63	O. J. Carver	1957	240	R	5	L	G	Tc	1.0	2,362.1	a120
24Z1	GS	5- 8-63							Ds			2,364	P
CW-9/13-24		1929							Ir				

24Z2	GS	5- 8-63 1908	Fairview Mining Co.	B	5½	H	Ds	2,362	
26A1	GS	4-25-63		R	6	S N	Un	Tec 1.0	2,360.4 101.51
26D1	GS	5- 9-63 1908	Mrs. A. E. Lynn	Dg	72 8	N N C G	Ds		2,377.2 dry P
26E1	GS	5- 9-63	N. J. Nilson	256	16	T E	Dm		2,374.2 W
27H1	GS	5-16-63			5	N N	Un	Tc .8	2,375.2 103.50
27J1	GS	5-16-63		92.3	6	L	Ds	Tc .7	2,376.4 dry
27N1	GS	3- 6-63	Mrs. W. H. Burnley	580	14	T 125	Ir		2,393.3 (b) P,W
27Q1	GS	5-16-63	V. John	600	R 16	T 100	Ir		2,385.2 (b)
28D1	GS	3-20-63			N N N		Ds		2,406.9
28D2	GS	3-20-63		1.5	6	N N	Ds	Tc 1.5	2,406.9
28F1	GS	3- 6-63	E. H. Scheele			T 1	Dm		2,403.6 (j)
28G1	GS	3- 6-63	M. O. Berry	485	14	S 1	Dm		2,403.5 (i)
28G2	GS	3- 6-63	M. O. Berry	487	14	N N	Un	Tc 1.2	2,403.4 230.88 L,P
28K1	GS	3- 6-63	M. O. Berry	487	R 14	T 125	Ir	Tap .1	2,402.6 (b) P
28N1	GS	3- 7-63 3- 7-57 11-27-56	John C. Kugler	350	14	T 100	Ir	Tap .5	2,411.8 ds93 ds72 ds77 P

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data				Measuring point	Altitude of lsd (feet)	Water		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power			level	Depth below lsd (feet)	

T. 9 N., R. 13 W.--Continued

9/13-28P1	GS	3- 6-63	E. H. Scheele					Dm	2,402.8	(j)		
28P2	GS	3- 6-63	O. M. Cryton	1956				Dm	2,406.3	(j)		
28Q1	GS	3- 6-63	J. F. McKinzie	1913		Dg	L E	Ds	2,400.8	dry <u>f</u>		
28R1	GS	3- 6-63						Un	2,397.8	(j)		
29E1	GS	3-19-63	Stoner Ranch No.5	1957	425	R	14 T 100	Ir	2,426.0	(b)		P, W
29E2	GS 0	3-19-63 1949	Stoner Ranch No.4	1949	694	R	16 T 75	Ir	2,429.6	(b) 115		P
29G1	GS DWR	3-19-63 4-14-60	Albert Veldhuizen		440		16 S 150	Ir	2,418.5	257.60 200.9		P
29J1	GS	3- 7-63	Shady Lane Ranch		390	R	14 T 100	Ir	2,415.6	238.90		P, W
29N1	GS SCE SCE	3-19-63 8-11-59 8-11-59	Stoner Ranch No.3		560		T 75	Ir	2,430.8	(b j) 262.6 b348.0		P
29Q1	GS FC-12416	3- 7-63	Shady Lane Ranch	1946	418	R	12 N N	Un	2,422.0	ds164		L
29Z1	GS DGT-18	3-21-63 1-16-20			54	Dg	42	Ds	2,428	52.6		

30D1	GS HRJ-261	3- 7-63 1908	L. A. Overton	1908	62.5		L W	Ds Dm	2,458	58
30E1	GS O O	3- 7-63 5- -58 5- -57	Fred Moldenhovser		408	R 14	S 1½	Dm	2,458.5	ds170.12 P 168 184
30M1	GS	3- 7-63	A. C. Shufeldt	1954	300	R 8	S 1½	Dm	2,456.4	f220
30N1	GS	3-21-63	M. & R. Ranch		500	R 14	T 50	Ir	2,452.0	
30P1	GS	3-21-63	M. & R. Ranch	1961	790	R 18	T 150	Ir	2,444.8	275.70 P
31B1	GS	3-21-63	M. & R. Ranch		500	14	T 100	Ir	2,441.8	(b)
31E1	GS	3-21-63	M. & R. Ranch		500	R 14	T 100	Ir	2,456.0	256.93
31G1	GS	3-21-63	M. & R. Ranch		500	R 14	T 100	Ir	2,443.0	(b)
31M1	GS	3- 7-63	Ritter & Godde	1962	820	R 16	T 100	Ir	2,457.0	(b) P
31N1	GS	3- 7-63	Ritter & Godde	1949	520	16	T 75	Ir	2,459.2	bf350
31P1	GS	3- 7-63	Ritter & Godde	1952	500	14	T 75	Ir	2,452.2	fb340
31Q1	GS DGT-19 FC-12407	3-21-63 4- -17	M. & R. Ranch Arden Dairy	1917	0 443	12	N N	Ds	2,441.2	C,L,P 63
31Q2	GS	3-21-63	M. & R. Ranch		500	R 14	T 50	Ir	2,441.2	(b)
31Q3	GS	3- 7-63	Ritter & Godde	1946	500	12	N N	Un	2,445.3	248.30
32G1	GS	3-21-63	H. C. Sinclair	1944	600	12	T 75	Ir	2,425.8	(b) P

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water	Other data
				Year com- pleted	Depth (feet)	Type, Pump diam- eter and (in.)	power	level			Depth below lsd (feet)	

T. 9 N., R. 13 W.--Continued

9/13-32M1	GS	3-21-63	Jerry Godde	1961	678	R 14	T 100	Ir	2,433.3	292		P
32N1	GS	3-21-63	Jerry Godde		150		N N	Ds	2,440	dry ^{h/}		
32Q1	GS	3-21-63	H. C. Sinclair	1954	600	R 14	T 125	Ir	2,420.1	d237.60		P
33B1	GS 0 0	3-22-63 1962 2- -56	R. D. Sherwood	1956	339	R 12	S 1½	Dm	2,401.3	ds167.30 259 155		
33B2	GS	3-22-63	R. D. Sherwood		0	12	N N	Ds	2,402.3			
33B3	GS	3-22-63	R. D. Sherwood		188.0	10	N N	Un	2,398.7	152.75		
33K1	GS	3-20-63	Tullos Ranch		480	12		Un	2,400	(c h)		
33N1	GS	3-20-63	Tullos Ranch	1949	600	R 12	N N	Un	2,413.3	234.01		
33N2	GS	3-20-63	Tullos Ranch	1925	300		N N	Un	2,414.3	(c h)		
33Q1	GS	3-20-63	Tullos Ranch		300	10	N N	Un	2,403.0	(c h)		
34D1	GS	3-22-63	Frank Johnson		15.0	7	N N	Ds	2,392.0	dry		
34D2	GS	3-22-63	Frank Johnson				T E	Dm	2,392.4	(c)		
34E1	GS	3-22-63				N	N N	Ds	2,391.8			

34G1	GS FC-12457	3-19-63	Stoner Ranch No.2		805	R	T	125	Ir	2,385.2	(b)	P
34N1	GS	3-20-63	Tullos Ranch	1946	600	R	12	N N	Un	2,395	(c h)	
34Q1	GS	3-19-63	Stoner Ranch No.1	1946	600	R	14	T 100	Ir	2,388.0	(b)	L,P
34Z1	GS HRJ-108	3-22-63 1908	Frank Johnson Hart	1905	540	B	5	5/8	Ds Un	2,392.0	12	
35D1	GS	5-14-63	Frank Tinz		206		8	S E	Dm	.5 2,376.3	(b)	
35E1	GS	5-14-63	Val Pierse				12	T 25	Ir	2,377.0	(c)	
35M1	GS CW-9/13-35	5-14-63 12- -29	John Reed					T	7½ Ir	2,380.6	(b)	
35M2	GS	5-14-63	John Reed		485		14	T 75	Ir	.5 2,379.2	216.85	
35P1	GS FC-12467	5-13-63	John Lesley		350		10	T 10	Ir	.1 2,377.5	(b)	W
35Z1	GS DGT-20 ^k /	5- 8-63 1920	P. D. Gaskill	1915	420		8	C	Ds	2,379	22	
35Z2	GS DGT-20 ^k /	5- 8-63 1920	P. D. Gaskill	1915	350		10	C	Ds	2,379	22	
36E1	GS	5-10-63	James Vernan		161		6	J 1	Dm	.7 2,362.1	105.30	
36G1	GS	5-10-63	W. P. Callegari		150		8	L 3/4	Dm	.75 2,353.9	82.99	W
36N1	GS	5-13-63						L N	Un	2,360.8	(c)	
36P1	GS	5- 9-63	William Kogel	1963	300	R	8	T 5	Ir	2,353.8	(c)	

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring power	Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth (feet)	Type, Pump diam- eter (in.)	Use	Depth below lsd (feet)					

T. 9 N., R. 13 W.--Continued

9/13-36P2	GS	5-10-63	Kogel		220	R	8 T 15 R		2,358.0	(b)		
36Q1	GS	5- 9-63	Stephen Dutkiewicz	1960	250	R	6 S 1½ Dm	Tcc	1.0	2,353.0	(b)	
36Q2	GS	5- 9-63	Stephen Dutkiewicz	1953	100	6	S 1½ Un		2,353.5	(c)		
36R1	GS	5- 9-63	Ken Walker	1955	200	R	6 S ½ Dm	Tcc	.4	2,345.6		93.50
	GS	3- 1-62										85.00
	GS	11-17-60										89.24

T. 9 N., R. 14 W.

9/14- 4B1	GS	5-21-56	John Lane		242.5	12	N N	Ds	Tc	0	2,925	dry	
	DGT-13	1920			550	12						250	
4B2	GS	5-21-56			11.8	7		Ds	Tc	2.4	2,925	dry	
9F1	GS	2-20-63			310	C	N N N	Ds	Ls		2,772.6	dry	
15M1	GS	2-20-63	Silver Shield Dairy Farms	1957	700	R	14 T 50	Ir			2,594.2		L,W
15M2	GS	2-20-63	Silver Shield Dairy Farms	1954	700	R	14 T 150	Ir			2,589.8	bf290	L
15P1	GS	2-20-63	Silver Shield Dairy Farms	1934	280	14	N N	Ds			2,560	dry	P

15Q1	GS	2-20-63	Silver Shield Dairy Farms	1961	754	R 14	T 150	Ir		2,559.2	fb270	L,P
16G1	GS	2-20-63				R 14	N N	Un	Tc	1.0	2,645.8	328.95
16K1	GS	2-20-63	Jack Kalpakoff	1950	721	R 16	T 200	Ir		2,624.1	(i)	L,P
16M1	GS	4-30-63	Jack Kalpakoff	1963	0	R N	N N	Ds		2,640		L
	GS	4-30-63		204				T				
16M2	GS	4-30-63	Jack Kalpakoff	1963	0	R N	N N	Ds		2,635		L
	GS	4-30-63		500				T				
16M3	GS	4-30-63	Jack Kalpakoff		0	N N	N N	Ds		2,640		
16M4	GS	5- 7-63	Jack Kalpakoff	1963	705	R 14	T G	Un		2,635.0	(i)	L,P
19P1	GS	2-21-63	Frank Lotita	1963	270	R N	N N	Un		2,665	(a r)	
19P2	GS	3- 7-63	Frank Lotita	1963	782	R 14	N N	Un	Tc	1.0	2,661.5	265.62
20B1	GS	5- 8-62	E. W. Bertram	1955	540	R 14	N N	Un	Tap	.4	2,656.4	279.64
20B2	GS	6-29-62				N N	N N	Ds		2,655		
	FC-12314	11-21-41	Allied Ranch & Development Co.		190			Ds			dry	
20M1	GS	6-28-62			0	6	N N	Ds	Tc	2.6	2,659.1	
21D1	GS	6-28-62	Le Jan Corp.		600	R 12	T 125	Ir		2,620.7	(b)	P,W
21G1	GS	6-28-62	Le Jan Corp.		500	R 10	T 125	Ir		2,593.5	(b)	
22A1	GS	2-21-63	Bozigian Ranch	1953	350	R 14	T 60	Ir	Tc	0	2,544.3	(b)

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water		Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use			level	Depth below lsd (feet)	

T. 9 N., R. 14 W.--Continued

9/14-22B1	GS O	2-21-63 2-21-63	Bozigian Ranch	1953	350	R	14 T 75	Ir		2,552.7	bf280 b300		P
22H1	GS HRJ-200	3-20-63 1909	Bozigian Ranch Charles Forsyth	1909	200 130		L H	Ds Dm		2,542.9	dry 125		
22J1	GS HRJ-201	3-20-63 1909	G. L. West	1909	300	B	N N N	Ds		2,542	120		
23B1	GS	2-27-63	Lysle Greenman	1950	500	R	14 T 75	Ir		2,517.6	(i)		C
23D1	GS DWR	3-19-63 4- 8-63	Bozigian Ranch	1963	729	R	14 N N	Un	Hpb 1.0	2,536.3	267 256.9		L,P
24D1	GS O	2-27-63 1961	Jack Kalpakoff	1957	500	R	14 T 100	Ir		2,496.8	200		
24D2	GS	2-27-63	Jack Kalpakoff		200		L W	Ds		2,498.0	dry f/		
24K1	GS FC-12384A	2-27-63	Barney Bailey		215.0		14 N N	Ds	Tc 0	2,480	dry		W
24L1	GS O	2-27-63 4- -53	Barney Bailey	1953	520		14 T 200	Ir		2,480.3	r234 150		C

24Q1	GS FC-12384	2-27-63	Barney Bailey	1908	402	B	6	14 N N	Un	Tc	.7	2,477.5	ds144	W
24R1	GS FC-12385	2-27-63	Barney Bailey	1946	360	R	12 T	40	Ir	Tc	2.0	2,465.0	ds149	
24Z1	GS HRJ-262	2-28-63 1908	Duniway	1908	402	B	6		Ds Ir			2,467	73	L
25B1	GS FC-12385D	2-27-63	Wilmar Farms	1946	359	R	12 S	2	Dm			2,474.2	(b)	L,P
25B2	GS SCE SCE SCE SCE FC-12385C	2-27-63 11- -62 11- -62 6-30-54 6-30-54	Wilmar Farms	1962	666	R	16 S	150	Ir			2,475.5	(b)	P
25B3	GS	2-27-63	Wilmar Farms	1962	0	R	N N N		Ds T			2,474.2		
25B4	GS D	2-27-63 11-14-62	Wilmar Farms	1962	89.0		10 T	N	Ds	Tc	1.0	2,472.8	dry 89.2	
25B5	GS SCE FC-12385B	2-28-63 8- -40	Wilmar Farms	1954	0		N N N		Ds T			2,497		
25D1	GS D	2-27-63 1-29-54	Wilmar Farms	1954	500	R	14 N N		Un	Tc	0	2,491.5	243.19	
25E1	GS	2-27-63	Wilmar Farms	1954	500	R	14 N N		Un	Tc	0	2,491.5	243.19	

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level	Other data
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power	Use				

T. 9 N., R. 14 W.--Continued

9/14-25G1	GS FC-12385A	2-28-63 8- -42	Wilmar Farms		0	N	N N	Ds		2,464.4	75		
25K1	GS	2-27-63	Wilmar Farms			14	N N	Un	Tc	0	2,470.0	238.58	P
25N1	GS	2-28-63	Paul Dexter	1951	181.0	6	N N	Ds	Tc	1.0	2,482	dry	
25N2	GS	2-28-63	Paul Dexter	1954	300	6	S 2	Dm	Tcc	1.0	2,476.9	t251.83	
25P1	GS D FC-12376	2-28-63 9- -46	L. W. Anderson	1946	347.5	R 12	N N	Un	Tc	1.0	2,470	251.17 85	L,P
25P2	GS	2-28-63	L. W. Anderson	1962	570	R 12	T 100	Ir	Tap	0	2,470.7	274.97	
25Q1	GS	2-27-63	Wilmar Farms	1954	1,015	R 16	T 75	Ir			2,464.8	(b)	P
26A1	GS D	2-26-63 11-28-62	Wilmar Farms	1962	0 683	R N	N N	Ds T			2,505		
26G1	GS	2-27-63	Wilmar Farms			12	T N	Un	Bhc	.13	2,505.4	(i)	
26G2	GS D	2-27-63 1- 4-54	Wilmar Farms	1954	0 759	R N	N N	Ds T			2,510		
26Q1	GS	2-28-63 1947	Charles Etter	1947	0 375	R N	N N	Ds 12			2,499.2		

27B1	GS 0	2-21-63 1962	Armando Iarussi	1960	557	R 14	T	75	Ir	2,542.1	(b) 250	L,P
27C1	GS	2-21-63	Armando Iarussi	1954	500	R 16	T	125	Ir	2,555.7	f276	P
27R1	GS	2-26-63	L. C. Weaver	1946	400	R 12	T	75	Ir	2,522.9	261.50	W
28B1	GS 0	2-18-63 8- -62	Lysle Greenman	1960	600	R 14	T	125	Ir	2,583.1	269.40 b348	
28D1	GS SCE SCE	2-18-63 2-21-63 7-18-62 7-18-62	Lysle Greenman	1960	600	R 14	T	125	Ir	2,604.6	267.23 b278.70 277 b347	
29E1	GS 0	2-19-63 6- -62	Atchion & Irven	500	R 14	T	200	Ir	2,617.0	238 300	P	
29M1	GS FC-12306A	2-19-63	Atchion & Irven	0	N 6	N N	N N	Ds	2,620		W	
30H1	GS	6-28-62	John Kavara			T	150	Ir	2,639.4	(c b)	P	
30K1	GS	6-28-62	Tony A. Cafaro	1960	703	R 14	T	125	Ir	2,638.8		L,P
30K2	GS HRJ-8	6-29-62 1908	Tony A. Cafaro American Mexican Cattle Co.	1891	255	N 7	N G	N S	2,625	180		
31K1	GS	6-28-62	J. Cimmerusti	1958	675	R 14	T	125	Ir	2,604.3	b221	L,P
31K2	GS GS	6-28-62 2-19-63	J. Cimmerusti	1960	600	R 14	T	100	Ir	.42 2,604.0	(b) e229.16	L

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level	Depth below lsd (feet)	Other data
				Year com- pleted	Depth (feet)	Type, Pump diam- eter (in.)	type and power	Use					

T. 9 N., R. 14 W.--Continued

9/14-31M1	GS	2-19-63	J. Cimmerusti	1963	713	R 14	N N	Un	Tc	1.0	2,613.9	203.68	L,P
32C1	GS	2-19-63	Actchion & Irven	1955	976	R 14	T 200	Ir	Hpb	1.0	2,587.5	bf339	C,P,W
32D1	GS FC-12306	2-19-63	Actchion & Irven	1933	500	16	T 5	Dm			2,606.7	(c)	C,W
34D1	GS 0	2-20-63 8- -62	Merton McCord		500	14		Ir			2,547.4	231	P
34M1	GS	2-21-63	Robert Monroe	1953	272.0	R 10	N N	Un	Tc	0	2,540.9	255.01	L,P
34Z1	GS	2-26-63	M. Nelson				N N	Ds			2,534		
35K1	GS	2-28-63	R. I. Embleton			14	T 100	Ir	Bpb	.8	2,499.1	295.43	
35N1	GS	2-28-63	R. I. Embleton				T 150	Ir			2,511.0	(b c)	
36D1	GS	2-28-63	R. S. Tomkins	1960	1,003	14	T 150	Ir	Tap	0	2,473.0	303.43	
36G1	GS	2-28-63	Jack Kertzman	1957	821	14	T 125	Ir			2,465.4	(b)	L
36M1	GS	2-28-63	Kline Ranch		500	14	N N	Un	Tc	0	2,485.5	299.48	
36M2	GS FC-12377	2-28-63	Kline Ranch	1955	628	R 14	T 100	Ir	Tap	1.5	2,484.3	303.72	L,P

36P1	GS	2-28-63	Kline Ranch	1,000	R	14	T	50	Ir	2,480	(b) b350	P
	O	2-28-63										
36Q1	GS	3- 1-63	W. M. Garland	600	R	14	T	75	Ir	Tap 1.0	(b)	L
36R1	GS	3- 1-63	W. M. Garland				T	75	Ir	Bpb .2	a266.8	
<u>T. 2 N., R. 15 W.</u>												
9/15- 4A1	GS	5- 2-62					L	N	Un	3,220	(c)	
6D1	GS	3-26-63		.9		6	N	N	Ds	Tc 1.8	3,750	
6E1	GS	4- 2-62		0		6	N	N	Ds	Tc 5.5	3,705	
11A1	GS	5- 2-62	Fred Kennedy	760	R	8	S	E	Dm	Tcc 1.0	2,953.4	L,P
11R1	GS BW	5- 2-62 8-31-31	Meridian Oil Co.	0 3,826		N	N	N	Ds T		2,885.2	L
12M1	GS	3- 7-63	E. W. Bertram	697	R	14	N	N	Un	2,899.1	(c)	L,P
25D1	GS	5- 3-62	H. W. Hunter	148.4	R	8	N	N	Ds	Tc 1.0	2,689.8	L,W
FC-12265												
26N1	GS D	2-19-63 8- -62	Lysle Eckhart	600	R	8	S	25	Ir	Tcc .1	2,642.4 187	L
34A1	GS	2-19-63	Gene Decker	325		10	T	25	S		2,641.7	177
34B1	GS	2-19-63	Chet Scott	185			L	W	S		2,648.0	180

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data					Measuring point	Altitude of lsd (feet)	Water level		Other data
				Year com- pleted	Depth (feet)	Type, Pump diam- eter (in.)	and power	Use			Depth below lsd (feet)		

T. 9 N., R. 16 W.

9/16- 2Q1	GS	4- 2-62			0	Dg 24	N N	Ds	3,705			
12N1	GS	4- 2-62			1.8	8	N N	Ds	3,490			
36A1	GS FC-12186	4- 3-62	James Woo	1955	1,085	R 14	T N	Un	Tap 1.0	2,885	260.10	L,W
36C1	GS FC-12166	4- 3-62	James Woo	1956	1,020	R 14	N N	Un	Tc 0.5	2,925	267.1	L,W
36D1	GS	4-11-62 1959	James Woo		0 1,150	R	N N N	Ds T		2,940		

T. 9 N., R. 17 W.

9/17-15Q1	GS O & G	3-26-62 10-10-53	Tejon Ranch La Liebre No. 2	1953	0 2,283	N	N N	Ds T		3,500		L
21F1	GS O & G	3-27-62 8-11-54	Tejon Ranch Sycamore No. 1	1954	0 n317	N	N N	Ds T		3,500		L
22C1	GS O & G	3-27-62 5-31-53	Tejon Ranch La Liebre No. 1	1953	0 1,495	N	N N	Ds T		3,400		L
22M1	GS O & G	3-26-62 3- 4-54	Tejon Ranch Cliff Petroleum Co. No.22-2	1954	0 2,385	N	N N	Ds T		3,300		L

22M2	GS O & G	3-26-62 7-22-53	Tejon Ranch Cliff Petroleum Co. No. 22-1	1953	0 800	N N N	Ds T	3,300	L
24K1	GS	3-29-62	C. O. Barns		253.0 C	24 N N	Ds	3,250	dry
27J1	GS O & G	3-26-62 12- 7-22	Tejon Ranch Robert Watchhorn No. 1	1922	0 4,150	N N N	Ds T	3,160	L
28Z1	GS DGT-23	4- 2-62 1920	Tejon Ranch C. H. Windhan		0 1,395	N N N	Ds	3,180	400
32B1	GS O & G	3-27-62 4-15-54	Tejon Ranch Li-Jo Oil Co. No. 32-1	1954	n1,554	12 N N	Ds T	3,175	L
32B2	GS O & G	3-27-62 5-16-54	Tejon Ranch Li-Jo Oil Co. No. 32-2	1954	23.5 n1,602	N N	Ds T	3,175	dry
10/14-22B1	GS	5- 2-63	<u>T. 10 N., R. 14 W.</u>						
27M1	GS O & G	5- 8-63 5- -36	Regina Oil Corp. Ltd. Lucky Strike No. 1	1936	0 n4,126	N N N	Ds T	3,108	L
10/15- 6F1	GS	5- 2-62	<u>T. 10 N., R. 15 W.</u>						
6F2	GS	5- 2-62	Howard Gish		136	8 L W	Dm	5,175	21.18
6G1	GS	5- 2-62	Art Hayes		140	8 L H	Dm	5,200	24.22
8H1	GS	5- 2-62	Whiteoak Ranch		10.0 Dg	48 Si Gr	Dm	5,150	4.55
	GS	5- 2-62	Whiteoak Ranch		6.5 Dg	36 Si Gr	Dm	4,350	1.90

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data				Measuring point	Altitude of lsd (feet)	Water level	
				Year com- pleted	Depth (feet)	Type, diam- eter (in.)	Pump type and power			Depth below lsd (feet)	Other data

T. 10 N., R. 15 W.--Continued

10/15-32A1	GS	5- 2-62				8	L W	Un	Tc	0	3,395	al50
33D1	GS	5- 2-62				12	L H	Un	Tap	1.8	3,370	154.50

- a. Tape smear.
- b. Well being pumped.
- c. No access into casing.
- d. Well has falling water.
- e. Nearby well being pumped.
- f. Reported by owner.
- g. Well redrilled.
- h. Well capped.
- i. Obstruction in well, tape hangs up.
- j. Locked pumphouse.
- k. Duplicate well number (Thompson, 1929).
- m. Measurement of questionable accuracy.
- n. Well reported to have penetrated basement rock.
- p. Well recased.
- r. Hole full of drilling mud; well not yet completed.
- s. May not be water surface.
- t. Water level recovering from pumping.

APPENDIX B

TABLE 2. RECORDS OF THE WATER LEVEL IN WELLS

Table 2.--Records of the water level in wells

This table includes records of water-level measurements made in wells where five or more measurements have been made; if fewer than five measurements were made, the records are given in table 1. Static water levels measured at the time of pumping tests are given in table 5. Numbers given wells by other agencies are listed in table 1.

Altitudes are in feet above mean sea level for the land-surface datum at the well. Altitudes given in whole feet are interpolated from topographic maps; those given in feet and tenths have been determined by spirit leveling.

Measurements of the water level were made by the following organizations or individuals: Cyril Williams, engineer; well drillers; California Department of Water Resources; Los Angeles County Flood Control District; U.S. Geological Survey; well owner; pump company; Southern California Edison Co.; and U.S. Department of Agriculture, Soil Conservation Service. All measurements listed are depth to water below or above (+) land-surface datum. That is, the altitudes of the measuring points, as reported above or below land-surface datum, have been subtracted from or added to the measured water level. If more than one measuring point has been used, they were checked in the field and related to each other. Thus, all measurements are referred to a common datum. The latest measuring points used by the Geological Survey are listed in table 1.

Date	Water level	Date	Water level	Date	Water level
7N/13W-3D1. Altitude about 2,378 ft. Depth 400 ft in March 1937.					
Mar. 27, 1945	65.5	Nov. 1951	94.5	Mar. 8, 1958	129.0
Nov. 8	64.8	Dec. 5	95.1	Mar. 17, 1959	189.5
Dec. 12, 1946	59.7	Oct. 29, 1952	129.5	Mar. 9, 1960	139.3
Dec. 9, 1947	60.4	Nov. 13	c115.0	Apr. 14	181.3
Dec. 8, 1948	75.0	Nov.	95.1	Oct. 19, 1961	176.0
Dec.	75.0	Nov. 1953	109.5	Apr. 4, 1962	176.1
Nov. 28, 1949	93.4	Nov. 1954	124.5	Apr. 10, 1963	185.2
Nov.	74.5	Nov. 1955	129.5	May 28	169.00
Nov. 1950	64.5	Nov. 1956	155.1		
Dec. 2	86.75	Nov. 20	159.1		
7N/13W-3D2. Altitude about 2,378 ft.					
Mar. 27, 1945	43.5	Dec. 8, 1948	54.55	Nov. 13, 1952	64.5
Nov. 8	48.35	Dec. 2, 1949	57.15	May 28, 1963	77.65
Dec. 12, 1946	48.7	Nov. 28, 1950	60.0		
Dec. 9, 1947	51.55	Dec. 5, 1951	62.35		
7N/13W-5D1. Altitude about 2,427 ft. Depth 452 ft in August 1940; 439 ft, December 8, 1955.					
Nov. 25, 1953	164.6	Nov. 11, 1954	183.71	Dec. 8, 1955	212.8
Mar. 24, 1954	151.9	Mar. 16, 1955	170.9	Mar. 7, 1956	212.1
7N/13W-6A1. Altitude about 2,433 ft. Depth less than 200 ft, May 14, 1963.					
Apr. 16, 1936	92.8	Nov. 17, 1939	102.0	Apr. 20, 1943	109.3
Jan. 8, 1937	90.8	Dec. 6, 1940	103.8	Dec. 6	115.3
Apr. 22	94.9	Apr. 25, 1941	98.4	Dec. 6, 1944	112.85
Nov. 9	98.7	Dec. 3	105.0	Mar. 5, 1945	110.2
May 23, 1938	a99.3	Apr. 21, 1942	107.3	Nov. 8	122.1
Mar. 8, 1939	99.1	Nov. 24	112.9	1963	(f)
7N/13W-7B1. Altitude about 2,446 ft. Depth 610 ft in 1937.					
1947 a285		1950 a315		1953 a345	
1948 a295		1951 a325		1954 a355	
1949 a305		1952 a335		Apr. 20, 1955	a367

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
7N/13W-7C1. Altitude about 2,454 ft. Depth 665 ft in 1947.					
1947	115	1950	a166	1954	185
	a135	1951	155		a207
1948	125		a177	1955	195
	a145	1952	165		a217
1949	135		a187	Apr. 21, 1956	205
	a155	1953	175		a227
1950	145		a197	May 23, 1963	236.63

7N/13W-7R1. Altitude about 2,430 ft. Depth 400 ft June 6, 1946.

Sept. 15, 1946	160	Apr. 12, 1952	210	June 10, 1957	232
	a170		a220		a252

7N/13W-9D1. Altitude about 2,398 ft. Depth 490 ft November 1947.

June	1948	a168	May	1951	a180	May	1954	a206
July		a174	July		a198	July		a220
Aug.		a178	Aug.		a204	Aug.		a220
Sept.		a176	May	1952	a184	May	1955	a204
June	1949	a166	June		a200	June		a220
July		a174	Aug.		a210	July		a230
Aug.		a188	June	1953	a202	Aug.		a230
Sept.		a188	July		a218	June	1956	a224
June	1950	a184	Sept.		a216	July		a244
July		a192	Apr.	1954	a204	Sept.		a248
Aug.		a194						

7N/13W-9K1. Altitude about 2,382 ft. Depth 500 ft in November 1953.

Apr.	1954	a144	May	1955	a190	May	1956	a204
May		a194	June		a204	June		a210
July		a204	July		a210	July		a220
Aug.		a206	Aug.		a216	Aug.		a220
Sept.		a216	Sept.		a214	Sept.		a224
Oct.		a210	Oct.		a210	Oct.		a220
Apr.	1955	a150						

7N/13W-9N1. Altitude about 2,388 ft.

Nov. 19, 1957	115.8	Nov. 13, 1959	114.0	Oct. 18, 1961	127.8
Mar. 12, 1958	106.3	Mar. 7, 1960	112.0	Apr. 9, 1962	131.8
Nov. 28	115.0	Oct. 24	119.8	Nov. 7	125.7
Mar. 19, 1959	116.5	Apr. 3, 1961	120.8	Apr. 1, 1963	125.0

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
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7N/13W-9Q1. Altitude about 2,381 ft. Depth 492 ft in November 1947.

Mar. 1947	a83	Sept. 1950	a173	Aug. 1953	a201
May	a120	Oct.	a169	Sept.	a197
July	a132	Apr. 1951	a152	Apr. 1954	a146
Aug.	a143	June	a172	June	a201
Sept.	a143	July	a177	Aug.	a206
Mar. 1948	a111	Aug.	a182	Sept.	a204
May	a136	Sept.	a185	Oct.	a206
July	a142	Oct.	a182	Apr. 1955	a175
Aug.	a153	Apr. 1952	a142	June	a200
Sept.	a157	May	a165	Aug.	a224
Apr. 1949	a135	July	a183	Sept.	a214
May	a156	Aug.	a188	Oct.	a221
July	a157	Sept.	a196	May 1956	a200
Aug.	a161	Apr. 1953	a166	June	a221
Sept.	a164	May	a176	Sept.	a225
Apr. 1950	a165	June	a179	Oct.	a217
May	a175	July	a192		

7N/13W-15N1. Altitude about 2,359 ft.

Apr. 13, 1960	37.4	Oct. 17, 1961	42.4	Apr. 1, 1963	45.0
Oct. 24	38.5	Apr. 9, 1962	39.2	June 4	40.45
Apr. 7, 1961	38.5	Nov. 7	41.2		

7N/13W-16B1. Altitude about 2,376 ft. Depth 260 ft November 24, 1942.

Nov. 24, 1942	42.52	May 2, 1944	38.8	Dec. 12, 1946	34.8
Dec. 1, 1943	37.5	Nov. 8, 1945	36.2	Dec. 9, 1947	(k)

7N/13W-16D1. Altitude about 2,386 ft. Depth 450 ft in October 1937.

1947	a90	1951	a112	1954	a133
1948	a95	1952	a117	1955	a139
1949	a101	1953	a125	1956	a145
1950	a106				

7N/13W-16J1. Altitude about 2,361 ft. Depth 100 ft before 1951.

Apr. 13, 1960	41.6	Apr. 9, 1962	43.1	Apr. 4, 1963	44.0
Oct. 24	42.4	Oct. 8	42.8	June 14	44.44
Oct. 17, 1961	43.8				

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
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7N/13W-17D1. Altitude 2,420.5 ft. Depth 450 ft in 1927; 162 ft November 8, 1945.

	1927	55	Dec. 6, 1944	99.6	Nov. 20, 1952	147.1
Nov. 9, 1937		91.5	Mar. 5, 1945	93.4	Dec. 1, 1953	152.2
Mar. 8, 1939		84.4	Nov. 13	107.1	Mar. 26, 1954	146.9
Nov. 17		98.7	Dec. 9, 1947	113.5	Nov. 15	155.3
Mar. 13, 1940		91.5	Nov. 30, 1948	124.1	May 18, 1955	153.89
Dec. 5		95.9	Jan. 4, 1950	135.4	Oct. 24	161.55
Apr. 25, 1941		99.5	Nov. 28	138.5	Nov. 21, 1956	157.9
Dec. 2		95.8	Dec. 7, 1951	144.0	Oct. 29, 1957	156.5

7N/13W-17D2. Altitude 2,420.5 ft. Depth 505 ft August 6, 1945.

Aug. 6, 1945	144	Mar. 12, 1958	m177.0	Oct. 24, 1960	m223.6
	1947 a179	June	260	Nov. 21	m207.0
	1948 a197	June	a285	Apr. 5, 1961	m217.4
	1952 a255	Nov. 13	m196.7	Oct. 19	m204.1
	1954 a271	Nov. 28	m193.7	Apr. 9, 1962	d228.5
	1956 a284	Mar. 19, 1959	m197.2	Nov. 7	216.3
Nov. 28, 1956	m184.7	Oct. 21,	m214	Apr. 1, 1963	247.7
Mar. 8, 1957	m183.6	Apr. 12, 1960	m216.5	Apr. 4	d247.2
Nov. 12	m190.7				

7N/13W-17E1. Altitude about 2,418 ft. Depth 450 ft in 1927.

1949 a190	1953 a228	1956 a260
1950 a200	1955 a248	

7N/13W-18B1. Altitude about 2,434 ft. Depth 700 ft before 1940.

Oct. 1946	160	Oct. 1950	170	Oct. 1953	185
Oct. 1948	165	Oct. 1951	175	Oct. 1956	205

7N/13W-18B2. Altitude about 2,439 ft. Depth 700 ft before 1940.

Oct. 1946	163	Oct. 1950	175	Oct. 1953	190
Oct. 1948	165	Oct. 1951	180	Oct. 1956	210

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
7N/13W-19A1. Altitude about 2,424 ft. Depth 400 ft about 1930.					
Oct. 23, 1957	201	Nov. 10, 1959	204.0	Apr. 6, 1962	217.5
Nov. 12	198.7	Mar. 7, 1960	193.5	Nov. 7	210.7
Mar. 12, 1958	184.7	Oct. 24	204.9	Apr. 1, 1963	219.2
Nov. 28	194.7	Oct. 17, 1961	213.1	May 28	223.45
Mar. 19, 1959	206.7				
7N/13W-19D1. Altitude about 2,470 ft. Depth 500 ft August 18, 1952.					
Aug. 13, 1952	160	Mar. 1, 1962	244	Dec. 3, 1962	268
Sept. 1956	237	Apr. 2	244	Jan. 2, 1963	258
Aug. 3, 1961	272	May 17	269	Feb. 1	257
Sept. 13	272	Aug. 6	277	Mar. 5	262
Oct. 6	272	Sept. 4	276	Apr. 1	269
Jan. 3, 1962	249.6	Oct. 1	278	May 13	278
Feb. 2	248	Nov. 2	272		
7N/13W-20Z1. Altitude about 2,375 ft.					
Oct. 4, 1921	36.9	Oct. 26, 1922	36.95	Jan. 10, 1924	36.7
Jan. 21, 1922	36.6	Feb. 25, 1923	36.5	Oct. 22	(f)
May 24	36.7	July 10	37.1	June 13, 1963	(k)
7N/13W-21B2. Altitude about 2,364 ft.					
Nov. 14, 1942	55.0	May 1, 1944	(f)	June 6, 1963	(k)
Dec. 1, 1943	57.15	Feb. 28, 1945	(f)		
7N/13W-21J1. Altitude about 2,371 ft. Depth 412 ft August 1929; 410 ft November 29, 1950.					
Aug. 1929	37	Feb. 28, 1945	63.9	July 1948	116
Nov. 24, 1942	65.9	Dec. 12, 1946	78.5	Nov. 29, 1950	113.0
Dec. 1, 1943	68.4	Dec. 9, 1947	84.2	June 5, 1963	176.98
May 9, 1944	87.0				

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
7N/13W-21J2. Altitude about 2,372 ft. Depth 182.3 ft May 18, 1955; 179.8 June 5, 1963.					

Nov. 24, 1942	62.81	Nov. 29, 1950	d107.35	Oct. 24, 1957	156.6
Dec. 1, 1943	65.2	Dec. 11, 1951	117.9	Nov. 13, 1958	155.9
May 9, 1944	86.85	Nov. 21, 1952	d126.1	Oct. 29, 1959	159.6
Feb. 28, 1945	58.95	Dec. 1, 1953	128.6	Nov. 21, 1960	161.8
Nov. 6	77.5	Nov. 15, 1954	139.4	Nov. 21, 1961	165.5
Dec. 9, 1947	79.55	May 18, 1955	144.83	Nov. 13, 1962	167.4
Dec. 15, 1948	86.65	Oct. 24	153.7	June 5, 1963	167.45
Dec. 2, 1949	99.20	Nov. 21, 1956	153.5		

7N/13W-21J3. Altitude 2,371.6 ft. Depth 600 ft June 5, 1963.

Nov. 24, 1942	67.04	Dec. 9, 1947	86.85	Nov. 21, 1956	97.1
Dec. 1, 1943	67.0	Oct. 24, 1955	a95.6	Nov. 13, 1958	167.7
May 9, 1944	84.55	Oct. 24	97.1	Nov. 21, 1960	166.1
Dec. 12, 1946	78.5				

7N/13W-27D1. Altitude about 2,387 ft. Depth 360 ft January 1942.

Aug. 12, 1946	141	Oct. 9, 1950	a226	Nov. 7, 1956	204.6
Aug. 12	a169	Feb. 22, 1955	a209	Nov. 7	a253.2
Apr. 14, 1948	a197	June 23	a248.2	June 5, 1963	j226.90
Oct. 9, 1950	189	Feb. 22, 1956	209		

7N/13W-27N1. Altitude about 2,418 ft. Depth 435 ft in 1929.

Nov. 24, 1941	116.8	Dec. 15, 1948	148.7	June 23, 1954	a283.4
Nov. 24, 1942	119.73	Dec. 9, 1949	a146.3	Nov. 15	212.3
Dec. 1, 1943	124.3	Oct. 9, 1950	a224	Nov. 1, 1955	b239.75
Feb. 28, 1945	122.90	Nov. 29	163.4	Oct. 31, 1956	264.6
Nov. 6	147.05	Nov. 24, 1951	192	Oct. 31	a297.5
Aug. 12, 1946	158	Dec. 18	171.9	Nov. 21	232.40
Aug. 12	a181	Nov. 24, 1952	180.6	Oct. 29, 1957	217.6
Dec. 12	134.65	Dec. 1, 1953	209.8	Nov. 17, 1958	243
Dec. 9, 1947	143.2				

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
7N/13W-28P1. Altitude about 2,475 ft. Depth 172.5 ft November 24, 1941; 210 ft May 1, 1944; 208 ft May 8, 1944; and 1.6 ft June 4, 1963.					

July 7, 1941	172	May 1, 1944	178.9	Dec. 9, 1947	185.6
Nov. 24	172.0	Nov. 6, 1945	190	Dec. 2, 1949	(f)
Dec. 6, 1943	(b)	Dec. 12, 1946	187.1	June 4, 1963	(k)

7N/14W-10E1. Altitude about 2,570 ft. Depth 500 ft May 1953.

Mar. 16, 1959	242.8	Apr. 3, 1962	280.2	May 4, 1963	275.7
Nov. 12	267.5	May 1	a286.00		
Apr. 12, 1960	259.5	Nov. 13	291.6		

7N/14W-10F1. Altitude about 2,557 ft. Depth 250 ft in 1927; 365 ft May 1, 1962.

Nov. 7, 1942	184.2	July 14, 1948	190.7	Nov. 15, 1954	228.3
Dec. 1, 1943	186.7	Oct. 14	191.4	Oct. 24, 1955	238.1
Mar. 12, 1945	186.0	Dec. 11	192.9	Nov. 21, 1956	244.7
May 7	186.7	Mar. 9, 1949	192.3	Dec. 18	242.0
June 28	186.2	July 13	195.4	Mar. 7, 1957	253.8
Oct. 2	186.6	Sept. 21	197.7	Oct. 29	259.0
Nov. 13	186.2	Dec. 9	195.4	Nov. 12	259.0
Jan. 7, 1946	186.2	Apr. 19, 1950	197.6	Nov. 14, 1958	255.8
May 4	186.6	Oct. 25	198.2	Oct. 21, 1959	264.8
July 5	185.0	Jan. 31, 1951	199.5	Mar. 10, 1960	273.0
Oct. 17	186.6	Apr. 23	200.2	Oct. 28	277.3
Dec. 11	186.4	Nov. 27	214.1	Nov. 21	275.0
Feb. 28, 1947	186.0	Apr. 30, 1952	215.0	Apr. 6, 1961	285.6
July 8	186.7	Mar. 10, 1953	221.6	Oct. 17	284.8
Nov. 18	188.4	June 10	219.4	Apr. 3, 1962	291.8
Dec. 8	189.1	Aug. 31	226.3	May 1	280.69
Jan. 20, 1948	188.6	Dec. 1	223.3	Apr. 5, 1963	287.2
Mar. 2	188.2				

7N/14W-10P1. Altitude about 2,583 ft. Depth 500 ft May 1, 1962.

Oct. 23, 1957	310.2	Nov. 28, 1958	302.7	Apr. 10, 1963	318.2
Mar. 13, 1958	309.7	May 1, 1962	314.03		

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
7N/14W-13Q1. Altitude about 2,490 ft.					
Oct. 23, 1957	241	Nov. 10, 1959	253.0	Apr. 6, 1962	b271.8
Nov. 12	240	Mar. 7, 1960	257.0	Nov. 7	268.4
Mar. 13, 1958	232.7	Oct. 24	258.2	Apr. 4, 1963	276.5
Nov. 28	241.2	Apr. 6, 1961	274.6	May 13	a288.91
Mar. 19, 1959	244.5	Oct. 17	270.4		

7N/14W-14F1. Altitude about 2,533 ft. Depth 160 ft in 1908; 152 ft December 18, 1919; 109.3 ft May 1, 1962.

	1909	120			
Dec. 18, 1919	146.5	Jan. 9, 1924	145.8	Oct. 6, 1925	146.2
Apr. 30, 1921	146.0	Mar. 28	145.55	Jan. 9, 1926	145.3
Oct. 14	146.6	July 4	145.8	May 16	145.0
Jan. 1, 1922	146.0	Oct. 22	146.5	Aug. 30	146.1
Apr. 30	146.9	Nov. 15	145.7	Oct. 15	146.3
May 24	146.0	Feb. 17, 1925	145.2	Jan. 20, 1927	146
Oct. 26	146.5	May 6	146.3	May 9	145.8
Feb. 24, 1923	145.8	June 8	145.4	Oct. 26	147.5
July 11	146.1	July 21	145.8	May 1, 1962	(f)

7N/14W-27B1. Altitude about 2,835 ft. Depth 300 ft May 1, 1962.

Oct. 23, 1957	184.5	Nov. 10, 1959	178.0	Apr. 6, 1962	156.9
Nov. 13	186.0	Mar. 7, 1960	153.0	May 1	152.00
Mar. 13, 1958	144.3	Oct. 24	190.0	Nov. 7	168.0
Nov. 28	162.5	Apr. 6, 1961	176.0	Apr. 1, 1963	156.0
Mar. 19, 1959	171.6	Oct. 17	175.0		

8N/12W-6E1. Altitude about 2,345 ft. Depth 300 ft May 10, 1963.

Nov. 29, 1958	67.0	Oct. 26, 1960	77.7	Nov. 14, 1962	81.0
Mar. 18, 1959	71.4	Apr. 5, 1961	75.6	Apr. 10, 1963	79.3
Nov. 17	73.4	Oct. 19	79.3	May 10	81.60
Mar. 8, 1960	71.4	Apr. 5, 1962	84.8		

8N/13W-5E1. Altitude about 2,440 ft. Depth 552 ft March 27, 1963.

Dec. 3, 1945	104	Mar. 9, 1960	219.8	Apr. 5, 1962	b298.2
Nov. 21, 1957	204.0	Nov. 27	244.9	May 22	a340.2
Mar. 14, 1958	195.0	Apr. 4, 1961	267.8	Nov. 14	269.3
Nov. 17, 1959	244.3	Oct. 19	b297.8	Apr. 10, 1963	264.8

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
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8N/13W-6L1. Altitude about 2,458 ft. Depth 303 ft in 1925.

May 10, 1936	100	May 18, 1938	128	Nov. 24, 1941	122
May 10	a116	Aug. 11	a112	Nov. 24, 1942	110
Oct. 20,	114	Nov. 29, 1940	118		

8N/13W-7H1. Altitude about 2,442 ft. Depth 404.6 ft April 11, 1963.

Dec. 6, 1940	96.05	Dec. 8, 1948	122.0	Nov. 11, 1954	j199.2
Dec. 28	95.30	Dec. 6, 1949	128.2	Mar. 15, 1955	167.8
Apr. 9, 1941	93.1	Dec. 13, 1950	139.8	May 17	219.17
Jan. 31, 1942	96.55	Dec. 5, 1951	147.25	Nov. 11	219.2
Dec. 6, 1943	103.25	Nov. 20, 1952	152.0	Mar. 8, 1956	203.8
Dec. 9, 1946	111.30	Nov. 25, 1953	j172.8	Nov. 20	218.4
Dec. 9, 1947	114.6	Mar. 24, 1954	179.4	Apr. 11, 1963	224.2

8N/13W-8C1. Altitude about 2,436 ft. Depth 120 ft in 1938;
2.0 ft April 17, 1963.

1938	69			Apr. 5, 1946	98.8
Dec. 6, 1940	89.7	July 23, 1943	94.75	Oct. 17	105.85
Apr. 23, 1941	85.3	Aug. 20	95.2	Dec. 10	103.95
Jan. 31, 1942	88.65	Sept. 24	96.0	Feb. 27, 1947	101.7
Apr. 25	88.75	Dec. 15	95.75	Apr. 9	101.15
July 31	91.8	Jan. 22, 1944	95.4	July 8	108.0
Aug.	92.45	May 4	93.6	Nov. 19	107.3
Sept. 25	93.17	Mar. 5, 1945	95.2	Jan. 21, 1948	109.01
Nov. 24	92.79	May 7	96.45	Mar. 3	108.5
Apr. 30, 1943	92.00	June 28	98.7	July 14	115.1
May 28	92.6	Oct. 2	101.9	Oct. 14	116.8
June 25	93.8	Nov. 7	102.05	Apr. 17, 1963	(k)

8N/13W-8D1. Altitude about 2,442 ft. Depth 53.3 ft April 17, 1963.

Nov. 10, 1937	85.8	Apr. 21, 1942	91.1	May 4, 1944	96.2
Mar. 8, 1939	85.0	Nov. 24	95.9	Dec. 6	99.95
Nov. 17	89.0	Apr. 20, 1943	a97.5	Nov. 8, 1945	j104.5
Apr. 25, 1941	88.2	Dec. 6	98.40	Apr. 17, 1963	(f)
Dec. 3	92.3				

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
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8N/13W-9K1. Altitude about 2,412 ft.

Oct. 20, 1957	209.3	Mar. 8, 1960	185.8	Mar. 5, 1962	203.9
Mar. 12, 1958	169.5	Oct. 27	213.5	Nov. 14	204.9
Nov. 27	186.5	Apr. 4, 1961	209.0	Apr. 10, 1963	208.6
Mar. 18, 1959	192.8	Oct. 18	216.4	Apr. 17	211.63
Nov. 17	192.9				

8N/13W-11Q1. Altitude about 2,374 ft. Depth 575 ft February 1, 1928.

Jan. 26, 1947	110	Mar. 18, 1959	150.9	Oct. 18, 1961	145.7
Dec. 9, 1951	149	Mar. 9, 1960	150.5	Apr. 5, 1962	137.4
May 5, 1956	166	Oct. 27	158.5	Nov. 14	161.0
Nov. 22, 1957	144.0	Apr. 4, 1961	160.0	Apr. 10, 1963	178.3
Nov. 29, 1958	144.5				

8N/13W-17F1. Altitude about 2,438 ft. Depth 570 ft September 7, 1952

June 9, 1954	a227.4	Mar. 17, 1959	210.1	Oct. 17, 1961	273.6
Sept. 29	a248.3	Nov. 9	247.8	Apr. 3, 1962	292.2
Aug. 31, 1955	a268.6	Mar. 9, 1960	231.0	Nov. 13	238.5
Aug. 29, 1956	a285.2	Oct. 27	266.5	Apr. 5, 1963	272.3
Nov. 13, 1957	243.0	Apr. 3, 1961	260.1	Apr. 18	284.52
Mar. 14, 1958	211.5				

8N/13W-18N2. Altitude about 2,460 ft. Depth 499 ft February 8, 1957.

Nov. 21, 1957	238.8	Mar. 8, 1960	230.6	Oct. 17, 1961	297.6
Mar. 12, 1958	221	Oct. 27	272.6	Apr. 3, 1962	276.2
Nov. 28	236.8	Apr. 3, 1961	263.4	Nov. 13	270.4
Nov. 9, 1959	267.2				

8N/13W-20B1. Altitude about 2,430 ft. Depth 610 ft January 12, 1953.

Dec. 1952	165	Nov. 28, 1956	223	Oct. 17, 1961	266.1
Dec.	a355	Nov. 13, 1957	222	Apr. 4, 1962	239.4
Apr. 15, 1953	190	Mar. 14, 1958	216.5	Nov. 13	241.7
Aug. 20	214.1	Nov. 27	221.5	Apr. 8, 1963	281.0
Aug. 31, 1954	228.7	Nov. 10, 1959	236.0	Apr. 26	256.83
Nov. 4, 1955	216.7				

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/13W-20D1. Altitude about 2,440 ft. Depth 596 ft January 25, 1935.					
Aug. 8, 1948	168	Apr. 11, 1952	172	Sept. 10, 1954	247
Jan. 5, 1950	154	Oct. 1	209	Nov. 28, 1955	222
Sept. 5	186	Aug. 26, 1953	230		
8N/13W-20K1. Altitude about 2,428 ft. Depth 603 ft March 11, 1946.					
Aug. 8, 1948	161	Apr. 11, 1952	154	Sept. 9, 1954	223
Jan. 5, 1950	128	Oct. 1	204	Nov. 28, 1956	218
Sept. 5	166	Aug. 26, 1953	214		
8N/13W-20M1. Altitude about 2,437 ft. Depth 601 ft April 22, 1944.					
Mar. 27, 1945	103.2	Sept. 5, 1950	173	Mar. 24, 1954	160.1
Nov. 8	110.3	Nov. 28	143.1	Sept. 10	228
Dec. 10, 1946	110.05	Dec. 5, 1951	151.0	Nov. 11	j184
Dec. 9, 1947	117.8	Apr. 11, 1952	158	Nov. 28, 1955	210
Aug. 8, 1948	159	Oct. 1	200	Mar. 6, 1957	115.8
Dec. 8	125.5	Nov. 20	156.3	Apr. 26, 1963	j234
Dec. 6, 1949	132.20	Aug. 26, 1953	217		
8N/13W-21G1. Altitude about 2,410 ft. Depth 478.5 ft May 1, 1963.					
Nov. 27, 1956	182.9	Sept. 9, 1959	205.1	Oct. 17, 1961	230.7
Mar. 6, 1957	168.0	Mar. 8, 1960	190.9	Apr. 4, 1962	214.1
Nov. 13	183.3	Apr. 12	205.3	Nov. 13	225.8
Mar. 14, 1958	175.2	Oct. 24	220.8	Apr. 8, 1963	225.0
Nov. 29	189.7	Apr. 3, 1961	230.0	May 1	222.5
Mar. 17, 1959	198.7				
8N/13W-22K1. Altitude 2,383.5 ft. Depth 480 ft about 1930.					
Nov. 28, 1942	55.6	Dec. 6, 1951	96.05	Nov. 28, 1958	119.5
Dec. 6, 1943	56.65	Nov. 19, 1952	100.2	Apr. 12, 1960	138.8
Mar. 5, 1945	52.0	Aug. 1954	183.4	Oct. 24	131.4
Nov. 8	65.50	Nov. 12	j119.7	Apr. 3, 1961	169.5
Dec. 12, 1946	63.75	Aug. 1955	187.4	Oct. 19	178.7
Dec. 9, 1947	70.06	Oct. 1956	194.2	Apr. 4, 1962	183.5
Dec. 8, 1948	76.8	Nov. 13, 1957	125.0	Nov. 13	182.1
Dec. 2, 1949	85.75	Mar. 13, 1958	119.6	Mar. 20, 1963	c182.10
Dec. 15, 1950	92.3				

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/13W-23M1. Altitude about 2,376 ft. Depth 450 ft in 1924.					
Nov. 28, 1942	50.62	Dec. 8, 1948	71.2	Sept. 10, 1953	154
Dec. 6, 1943	51.75	Dec. 2, 1949	81.3	Mar. 25, 1954	117.8
Nov. 8, 1945	61.8	Dec. 15, 1950	89.0	Aug. 31, 1955	172.4
Dec. 12, 1946	58.4	Dec. 6, 1951	93.6	Oct. 3, 1956	181.4
Dec. 9, 1947	64.7	Nov. 13, 1952	102.4	Dec. 19	112.8
8N/13W-26D1. Altitude about 2,360 ft. Depth 385 ft in 1948.					
Dec. 8, 1948	48.5	Mar. 8, 1956	101.8	Mar. 8, 1960	110.0
Dec. 5, 1951	77.94	Nov. 28	120.9	Oct. 24	126.3
Mar. 3, 1952	69.77	Mar. 6, 1957	101.7	Apr. 3, 1961	118.5
Nov. 13	90.0	Nov. 13	115.0	Oct. 17	128.8
Nov. 25, 1953	92.00	Mar. 13, 1958	103.5	Apr. 4, 1962	118.8
Mar. 24, 1954	85.6	Nov. 28	111.8	Nov. 13	124.8
Nov. 12	102.68	Mar. 17, 1959	124.9	Apr. 8, 1963	126.7
Mar. 15, 1955	91.8	Nov. 10	120.0	May 23	131.48
Nov. 1	118.4				
8N/13W-30A4. Altitude about 2,436 ft. Depth 75 ft December 1, 1945.					
Oct. 13, 1921	64.7	Aug. 9, 1923	62.1	Jan. 9, 1926	58.0
Jan. 6, 1922	54.9	July 4, 1924	62.1	May 13	61.8
Apr. 30	59.3	Oct. 20	58.8	Aug. 25	66.2
May 24	59.2	Oct. 22	59.4	Oct. 15	64.9
Aug. 23	61.1	Feb. 11, 1925	56.4	Jan. 19, 1927	60.4
Oct. 17	58.8	May 5	61.0	May 9	64.5
Mar. 20, 1923	56.5	June 8	61.4	Oct. 27	65.7
July 10	58.5	July 21	63.8	Dec. 1, 1945	(f)
July 26	61.9	Oct. 6	61.9	May 2, 1963	(k)
8N/13W-32N1. Altitude about 2,426 ft. Depth 570 ft July 1945; 320 ft May 18, 1955; 262.0 May 8, 1963.					
July 31, 1945	143	Dec. 2, 1949	131.5	Mar. 24, 1954	150.0
Nov. 8	108.4	Nov. 28, 1950	137.6	Nov. 11	(f)
Dec. 10, 1946	106.0	Dec. 5, 1951	143.8	Mar. 15, 1955	182.5
Dec. 9	113.2	Nov. 20, 1952	148.4	May 8, 1963	(j)
Dec. 8, 1948	120.65	Nov. 23, 1953	(f)		

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/13W-32N2. Altitude about 2,425 ft. Depth 603 ft in 1947.					
Mar. 15, 1955	182.5	Mar. 25, 1958	178.0	June 8, 1961	272.4
Nov. 1	175.5	Mar. 25, 1958	a192.4	June 8	a282.4
Mar. 6, 1956	173.5	Nov. 27	197.5	Nov. 18	194.8
Dec. 18	173.9	Nov. 12, 1959	190.5	Apr. 11, 1962	b200.9
Jan. 3, 1957	a173.6	Apr. 12, 1960	189.3	Nov. 14	184.5
Mar. 6	167.4	Oct. 28	b202.9	Apr. 10, 1963	b241
Nov. 19	204.0	Apr. 3, 1961	b192.0	May 8	n180.95
Mar. 13, 1958	176.0				

8N/13W-33Q1. Altitude about 2,387 ft.					
Jan. 10, 1943	20.7	Mar. 5, 1945	20.05	Nov. 8, 1945	19.05
Dec. 6	20.1	Mar. 27	21.10	Dec. 10, 1946	(k)
May 4, 1944	20.0				

8N/13W-33Q2. Altitude about 2,387 ft.					
Dec. 10, 1946	65.4	Dec. 8, 1948	81.6	Nov. 28, 1950	70.9
Dec. 9, 1947	69.3	Nov. 29, 1949	85.5	Dec. 5, 1951	(k)

8N/13W-33Q3. Altitude about 2,387 ft.					
Nov. 28, 1950	69.9	Nov. 1, 1955	157.2	Nov. 12, 1959	164.3
Dec. 7, 1951	102.7	Nov. 20, 1956	149.7	Oct. 28, 1960	189.1
Nov. 23, 1953	119.4	Mar. 6, 1957	143.7	Apr. 3, 1961	171.5
Mar. 24, 1954	109.9	Nov. 13	158.5	Oct. 19	171.0
Nov. 11	139.30	Mar. 13, 1958	132.3	Nov. 14, 1962	174.2
Mar. 16, 1955	113.4	Nov. 28	149.0	May 8, 1963	167.45

8N/14W-2Q1. Altitude about 2,497 ft. Depth about 410 ft in 1960; 332.8 ft April 10, 1963.

Mar. 8, 1960	248.5	Apr. 4, 1961	287.5	Nov. 14, 1962	290.8
Apr. 14	289.8	Oct. 18	304.9	Apr. 9, 1963	306.8
Nov. 27	301.4	Apr. 5, 1962	294.8	Apr. 10	c307.58

8N/14W-2Q2. Altitude about 2,500 ft. Depth 702 ft May 9, 1955.					
May 9, 1955	183	July 18, 1956	266.1	July 24, 1962	319.8
July 15	245.3	July 18	a288.9	July 24	a351.4
July 15	a254				

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/14W-2R1. Altitude about 2,494 ft.					
Nov. 24, 1942	124.32	Dec. 13, 1950	173.2	Mar. 8, 1956	214.2
Dec. 7, 1943	c127.45	Dec. 19, 1951	179.7	Nov. 20	234.3
Mar. 12, 1945	125.9	Nov. 24, 1952	188.3	Mar. 6, 1957	217.0
Nov. 14	127.5	Nov. 23, 1953	192.6	Nov. 13	237.5
Dec. 10, 1946	130.65	Mar. 24, 1954	185.2	Mar. 12, 1958	216.7
Dec. 9, 1947	132.0	Nov. 11	201.5 ⁴	Nov. 27	221.5
Dec. 9, 1948	145.3	Mar. 16, 1955	203.1	Mar. 8, 1960	(k)
Dec. 2, 1949	146.2	Nov. 3	211.2		
8N/14W-12A1. Altitude about 2,470 ft. Depth about 500 ft in 1940.					
Sept. 20, 1940	127	Dec. 7, 1943	114.5	Dec. 8, 1948	138.15
Sept. 20	124.0	May 3, 1944	116.4	Dec. 2, 1949	142.9
Nov. 29	126	Mar. 12, 1945	c116.75	Dec. 13, 1950	156.4
Nov. 29	124.1	Nov. 14	121.15	Dec. 19, 1951	161.65
Nov. 24, 1941	125.3	Dec. 10, 1946	123.5	Nov. 20, 1952	168.55
Nov. 24, 1942	111.6	Dec. 9, 1947	125.7	Apr. 10, 1963	(k)
8N/14W-12D1. Altitude about 2,482 ft. Depth 294.0 ft April 10, 1963.					
Apr. 11, 1939	121.5	May 3, 1944	124.2	Dec. 2, 1949	148.35
Sept. 1, 1940	124.0	Nov. 14, 1945	128.5	Dec. 13, 1950	161.9
Nov. 29	122.5	Dec. 10, 1946	131.0	Dec. 19, 1951	168.6
Nov. 24, 1942	119.32	Dec. 9, 1947	133.4	Nov. 24, 1952	177.0
Dec. 15, 1943	122.4	Dec. 8, 1948	a154.0	Apr. 10, 1963	n212.50
8N/14W-13C1. Altitude about 2,479 ft. Depth 390 ft in 1936.					
Sept. 9, 1952	169.4	Feb. 1, 1958	a222	Aug. 24, 1960	a254.1
Sept. 9	a183.4	Sept. 30, 1959	222.4	Apr. 14, 1961	227.9
Apr. 7, 1954	178.1	Sept. 30	235.9	Apr. 14	a249.1
Aug. 31, 1955	201.5	Apr. 14, 1960	221.3	Aug. 10	239.1
Aug. 31	a212	Apr. 14	a233.9	Aug. 10	a260.6
Feb. 1, 1958	207.5	Aug. 24	231.5	Apr. 24, 1963	247.95

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/14W-14R1. Altitude about 2,494 ft. Depth 253.7 ft May 16, 1955.					
Jan. 10, 1943	147.9	Nov. 24, 1952	183.8	Nov. 27, 1958	223.0
Dec. 7	149.8	Nov. 23, 1953	184.6	Mar. 16, 1959	227.3
May 4, 1944	135.2	Mar. 25, 1954	181.4	Nov. 9	225.5
Mar. 12, 1945	135.25	Nov. 11	195.12	Mar. 8, 1960	224.7
Nov. 14	140.6	Mar. 15, 1955	191.4	Oct. 27	225.9
Dec. 10, 1946	143.55	May 16	194.98	Apr. 3, 1961	225.9
Dec. 8, 1947	149.35	Oct. 31	208.3	Oct. 19	226
Dec. 8, 1948	145.9	Mar. 8, 1956	202.4	Apr. 3, 1962	235.6
Dec. 2, 1949	155.2	Nov. 20	204.5	Nov. 13	231.0
Dec. 12, 1950	169.3	Mar. 6, 1957	211.1	Mar. 29, 1963	225.80
Dec. 19, 1951	178.6	Nov. 13,	222.0	Apr. 5	225.5
8N/14W-15G1. Altitude about 2,525 ft. Depth 469 ft December 7, 1953.					
May 5, 1954	176.4	Nov. 9, 1959	193.1	Nov. 13, 1962	210.9
Dec. 1956	180.0	Apr. 13, 1960	b223.2	Nov. 27	217.0
Nov. 27, 1957	192.8	Oct. 28	203.5	Nov. 27	a225.4
Mar. 11, 1958	185.2	Apr. 3, 1961	207.5	Apr. 1, 1963	216.0
Nov. 27	197.0	Oct. 19	215.5		
8N/14W-17Q1. Altitude 2,588.5 ft. Depth 200 ft in 1943.					
Feb. 28, 1946	160.03	Oct. 30, 1946	159.25	Dec. 24, 1950	161.9
Apr. 13	158.30	Dec. 11	159.15	Dec. 3, 1951	165.0
Apr. 18	164.3	Apr. 9, 1947	158.9	Nov. 20, 1952	165.8
Apr. 30	159.35	July 8	159.5	Nov. 24, 1953	j176.5
May 21	159.80	Dec. 8	a159.7	Nov. 12, 1954	j162.1
May 31	159.75	Dec. 1, 1948	161.0	May 16, 1955	a160.6
June 19	159.35	Dec. 7, 1949	160.3	May 7, 1962	155.17
8N/14W-18N1. Altitude about 2,642 ft. Depth 865 ft February 19, 1954.					
Feb. 19, 1954	180	Nov. 12, 1954	154.23	Apr. 14, 1960	188.6
Feb. 19	a220	June 1, 1955	187.5	Apr. 2, 1962	189.2
Feb. 23	a220	Mar. 11, 1958	180.3	Nov. 13	151.8
July 22	190	Nov. 26	205.3		

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/14W-24A1. Altitude about 2,462 ft.					
May 30, 1921	78.8	Oct. 20, 1924	78.70	Jan. 9, 1926	78.8
Oct. 3	78.6	Oct. 22	78.8	May 13	79.0
Jan. 5, 1922	80.0	Feb. 11, 1925	78.2	Aug. 25	79.6
May 24	79.2	May 5	78.6	Oct. 15	80.8
Oct. 17	78.8	June 8	78.60	Jan. 19, 1927	79.4
July 10, 1923	78.60	July 21	79.0	May 9	79.2
July 27, 1924	78.6	Oct. 6	79.2	Oct. 27	80.0
8N/14W-25C2. Altitude about 2,476 ft. Depth 76.0 ft April 24, 1963.					
Dec. 1, 1945	138.0	Dec. 2, 1949	149.2	Nov. 24, 1952	169.8
Dec. 9, 1947	142.2	Dec. 13, 1950	155.8	Apr. 24, 1963	(k)
Dec. 8, 1948	148.8	Dec. 7, 1951	162.9		
8N/14W-25D1. Altitude about 2,483 ft.					
Dec. 10, 1946	143.2	Dec. 2, 1949	156.8	Nov. 24, 1952	180.2
Dec. 8, 1947	150.8	Dec. 13, 1950	163.5	Apr. 24, 1963	246.76
Dec. 8, 1948	157.2	Dec. 27, 1951	174.7		
8N/14W-25H1. Altitude about 2,456 ft. Depth 425 ft April 24, 1963.					
Nov. 21, 1957	234.4	Mar. 9, 1960	227.2	Apr. 3, 1962	277.8
Mar. 14, 1958	231.6	Oct. 27	237.8	Nov. 13	278.6
Mar. 16, 1959	228.6	Apr. 3, 1961	b248.4	Apr. 11, 1963	278.7
Nov. 12	242.6	Oct. 17	282.4		
8N/14W-36E1. Altitude about 2,488 ft.					
Nov. 28, 1956	230.8	Mar. 16, 1959	233.5	Oct. 17, 1961	245.8
Mar. 6, 1957	217.5	Nov. 12	243.9	Apr. 4, 1962	250.4
Nov. 13	232.1	Mar. 9, 1960	237.0	Nov. 13	264.5
Mar. 14, 1958	222.8	Oct. 28	252.9	Apr. 5, 1963	268.0
Nov. 27	232.5	Apr. 3, 1961	258.0	Apr. 25	270.10
8N/15W-1E1. Altitude about 2,617 ft. Depth 474 ft September 1950.					
Mar. 15, 1954	162	Apr. 15, 1955	a200	Apr. 1956	a210
Apr. 15, 1955	165	Apr. 1956	170	May 9, 1962	a240

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/15W-2Q1. Altitude about 2,645 ft. Depth 500 ft in 1954.					
Nov. 12, 1954	175.10	Mar. 12, 1958	183.0	Oct. 18, 1961	243.5
Mar. 15, 1955	174.9	Nov. 26	199.0	Apr. 2, 1962	203.6
Oct. 31	180.8	Nov. 13, 1959	231.0	Nov. 13	212.5
Mar. 8, 1956	177.3	Mar. 9, 1960	220.5	Apr. 4, 1963	220.3
Nov. 20	202.5	Oct. 26	223.7	Apr. 18	225.8
Nov. 15, 1957	184.2	Apr. 6, 1961	240.7	Apr. 18	a402.5
8N/15W-7N1. Altitude about 2,763 ft. Depth 653 ft January 1955.					
Mar. 25, 1955	145	Nov. 26, 1958	157.7	Oct. 17, 1961	154.2
June 22, 1956	120.5	Mar. 17, 1959	153.3	Apr. 5, 1962	153.3
July 19	206.4	Nov. 13	156.6	Nov. 8	176.5
July 19	a243.2	Mar. 8, 1960	156.3	Apr. 2, 1963	201.0
Nov. 14, 1957	153.8	Oct. 26	156.6	Apr. 2	203.4
Mar. 11, 1958	151.9	Apr. 5, 1961	151.5		
8N/15W-7P1. Altitude about 2,750 ft. Depth 750 ft in 1959.					
Oct. 1955	191.7	Nov. 20, 1956	160.1	Nov. 28, 1960	160.3
Oct. 1955	a219.7	Mar. 6, 1957	177.0	Apr. 11, 1962	175.10
8N/15W-10P1. Altitude about 2,712 ft. Depth 203 ft May 3, 1962.					
Dec. 17, 1945	141.8	Aug. 31, 1953	a147.2	Nov. 9, 1959	194.0
Jan. 7, 1946	141.6	Nov. 20	147.2	Nov. 13	139.0
Jan. 23	141.7	May 16, 1955	152.22	Jan. 5, 1960	144.6
Feb. 28	141.8	Dec. 18, 1956	141.5	Feb. 9	144.6
Apr. 18	153.9	Nov. 14, 1957	159.5	Mar. 1	144.6
Apr. 30	141.45	Mar. 11, 1958	143.0	Mar. 9	146.2
May 14	141.40	Oct. 7	143.4	Apr. 5	141.0
May 31	141.30	Nov. 26	150.0	Oct. 28	164.9
June 19	142.05	Dec. 2	143.5	Jan. 3, 1961	145.2
Feb. 28, 1947	140.5	Jan. 12, 1959	143.5	Feb. 7	145.2
Apr. 9	140.3	Feb. 3	143.6	Mar. 7	145.4
Nov. 18	139.25	Mar. 3	143.9	Apr. 4	152.9
Jan. 20, 1948	139.95	Mar. 18	p120.5	Apr. 6	147.7
Feb. 25	140.2	Apr. 7	152.8	Oct. 18	147.5
Oct. 13	138.7	May 5	143.9	Apr. 3, 1962	145.7
Dec. 1	138.5	Sept. 7	152.8	May 3	a163.30
Apr. 19, 1950	139.15	Sept. 8	143.4	Oct. 13	145.0
Mar. 10, 1953	142	Oct. 6	144.3	Apr. 4, 1963	b147
June 10	a144.8	Oct. 21	144.0		

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/15W-17R1. Altitude about 2,800 ft. Depth 138.1 ft May 3, 1962.					
Jan. 23, 1946	129.12	Apr. 30, 1947	122.95	Apr. 19, 1950	110.88
Feb. 27	128.47	May 14	122.50	May 10	111.0
Mar. 6	128.44	June 12	122.1	June 28	111.18
Mar. 18	128.25	July 3	121.92	July 16	111.15
Mar. 30	127.62	Aug. 7	121.30	July 25	111.20
Apr. 4	128.06	Sept. 4	121.00	Oct. 27	111.83
Apr. 13	127.90	Oct. 2	120.45	Dec. 12	111.65
Apr. 18	127.9	Nov. 18	119.61	Jan. 31, 1951	112.4
Apr. 30	127.72	Dec. 8	119.27	Feb. 27	112.3
May 6	127.57	Jan. 20, 1948	118.55	Mar. 27	112.4
May 14	127.45	Feb. 25	117.8	Apr. 18	112.84
May 21	127.37	Mar. 23	117.35	June 12	113.35
May 31	127.28	Apr. 30	116.65	July 2	113.4
June 1	127.28	May 26	116.16	Aug. 6	113.55
June 5	127.34	June 9	115.98	Sept. 18	113.75
June 19	127.10	July 13	115.35	Oct. 3	113.98
July 5	126.90	Aug. 12	114.9	Nov. 21	114.48
July 15	126.80	Sept. 14	114.47	Dec. 4	114.85
Oct. 4	125.58	Oct. 13	114.0	Apr. 18, 1952	115.8
Oct. 17	125.52	Nov. 30	113.5	May 19	115.92
Oct. 30	125.45	Jan. 18, 1949	112.8	June 11	116.00
Dec. 11	124.7	Mar. 9	112.17	Aug. 6	118.0
Dec. 18	124.65	Mar. 29	111.85	Aug. 20	118.3
Jan. 2, 1947	124.3	May 5	112.35	Oct. 1	118.45
Jan. 9	124.35	June 8	111.20	Nov. 19	(f)
Jan. 14	124.1	July 12	111.1	Feb. 17, 1953	118.40
Jan. 15	124.06	Sept. 21	110.9	Mar. 10	118.40
Jan. 30	123.9	Dec. 7	110.75	Apr. 7	118.8
Feb. 28	123.48	Jan. 18, 1950	110.85	May 6	(f)
Mar. 25	123.34	Jan. 24	110.73	Mar. 25, 1954	(f)
Apr. 9	123.10	Feb. 24	110.87	May 3, 1962	(f)
Apr. 18	122.95	Mar. 15	110.8		

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/15W-20N1. Altitude about 2,905 ft.					
Jan. 23, 1946	159.32	Oct. 30, 1946	157.8	Sept. 4, 1947	155.2
Feb. 28	159.02	Dec. 11	157.5	Oct. 2	155.25
Mar. 18	158.93	Dec. 18	157.5	Nov. 18	155.15
Apr. 13	158.65	Dec. 27	157.4	Dec. 8	154.95
Apr. 18	159.0	Jan. 9, 1947	157.15	Jan. 20, 1948	155.1
Apr. 30	158.75	Jan. 15	j156.3	Feb. 25	154.6
May 6	158.55	Jan. 30	j156.7	Mar. 23	154.6
May 21	158.6	Feb. 28	156.2	Apr. 30	154.5
May 31	158.55	Mar. 25	155.3	July 13	154.3
June 5	j158.50	Apr. 9	155.1	Oct. 13	154.1
June 13	158.5	Apr. 18	155.0	Nov. 29	153.8
June 19	158.35	May 14	154.9	Mar. 9, 1949	153.6
June 26	158.3	June 12	154.8	July 12	153.8
July 5	158.2	July 3	154.95	Sept. 21	153.9
July 15	158.19	Aug. 7	155.15	Jan. 24, 1950	(f)
Oct. 4	157.82				

8N/15W-22A1. Altitude about 2,744 ft. Depth ft October 1954.					
Jan. 11, 1954	133	Sept. 6, 1960	150.3	Apr. 3, 1962	c154.1
Jan. 11	a188	Oct. 4	146.0	May 1	c150.3
Feb. 27, 1957	132.5	Nov. 1	c151.7	May 7	c151.02
Feb. 27	a160	Nov. 21	c142.0	June 1	c151.7
Oct. 7, 1958	144.4	Jan. 3, 1961	142.0	July 2	a155.0
Nov. 5	c138.7	Feb. 7	c147.2	Aug. 6	c154.9
Nov. 14	138.0	Mar. 7	143.8	Sept. 5	c154.0
Dec. 2	132.0	Apr. 4	c149.8	Oct. 1	c156.8
Nov. 9, 1959	148.1	May 1	144.4	Nov. 13	144.7
Dec. 8	141.0	June 5	c152.5	Dec. 4	147.0
Jan. 5, 1960	139.8	July 18	c153.1	Jan. 8, 1963	147.1
Feb. 9	139.6	Aug. 7	146.2	Feb. 5	146.5
Mar. 1	c147.6	Sept. 5	145.4	Mar. 4	155.7
Apr. 5	148.4	Oct. 2	a154.8	Apr. 1	152.9
May 3	148.1	Nov. 7	a154.3	May 13	154.3
May 31	149.2	Nov. 21	149.4	June 4	155.4
June 28	c157.1	Jan. 8, 1962	144.1	July 1	a158.1
Aug. 2	c150.4	Feb. 5	143.7	Aug. 6	a158.3
		Mar. 5	143.4	Sept. 4	c154

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
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8N/15W-22A2. Altitude about 2,745 ft. Depth 425 ft February 1958.

Feb. 15, 1958	95	Nov. 15, 1958	94.5	Apr. 10, 1959	a161.5
May 5	96	Nov. 15	a149.5	May 7, 1962	a164.22
May 5	a152	Apr. 10, 1959	99.5		

8N/15W-22N1. Altitude about 2,817 ft. Depth 184 ft September 24, 1958; 177.5 ft May 3, 1962.

Feb. 27, 1946	184.4	Apr. 9, 1947	177.3	July 12, 1949	a177.0
Mar. 18	184.0	May 14	b181.2	Sept. 21	169.5
Apr. 18	183.8	June 12	a187.9	Dec. 7	169.2
Apr. 30	183.8	July 8	a198.6	Jan. 24, 1950	169.3
May 6	183.4	Aug. 7	176.0	Apr. 19	169.7
May 14	183.3	Sept. 4	179.1	June 30	171.0
May 31	183.2	Oct. 2	b179.6	June 10, 1953	176.6
June 1	183.2	Nov. 18	174.6	Mar. 25, 1954	179.3
June 5	183.2	Dec. 8	174.2	Nov. 12	180.97
June 19	182.9	Jan. 20, 1948	174.0	Mar. 26, 1955	182.4
July 5	187.8	Feb. 25	173.4	Mar. 26	184.8
July 15	182.5	Mar. 23	173.2	Mar. 1956	183.8
Oct. 4	180.8	Apr. 30	173.3	Nov. 26	184.8
Dec. 18	a183.3	July 13	171.8	Mar. 7, 1957	(f)
Jan. 2, 1947	178.9	Oct. 13	170.9	Oct. 23	202
Feb. 28	178.6	Dec. 1	170.6	Mar. 18, 1959	(f)
Mar. 25	177.5	Mar. 9, 1949	b171.4	May 3, 1962	(f)

8N/15W-22N2. Altitude about 2,817 ft. Depth 400 ft in 1955.

Nov. 26, 1956	180.5	Apr. 14, 1960	195.4	Apr. 2, 1962	198.7
Mar. 7, 1957	190.8	Oct. 28	210.4	May 3	198.95
Nov. 15	202	Apr. 6, 1961	197.0	Nov. 13	197.5
Mar. 11, 1958	198.0	Oct. 18	198.1	Apr. 3, 1963	200.6

8N/15W-24B1. Altitude about 2,665 ft. Depth 180 ft in 1932.

July 1932	137	Dec. 6, 1944	156.6	Oct. 2, 1945	156.1
Feb. 18, 1943	157.1	Mar. 12, 1945	156.5	Nov. 13	156.2
Dec. 1	159.3	May 7	156.5	Jan. 7, 1946	(k)
May 2, 1944	156.8	June 28	156.4		

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/15W-24B2. Altitude about 2,669 ft. Depth 252 ft March 10, 1946.					
Mar. 15, 1946	152.0	July 12, 1949	b148.2	Nov. 19, 1952	150.75
Apr. 4	150.6	Sept. 21	146.4	Mar. 8, 1956	147.4
July 3	151.6	Dec. 7	b145.9	Aug. 1	a250.2
July 8, 1947	149.3	Apr. 18, 1950	146.75	Nov. 27	159.3
Nov. 18	147.8	July 24	148.0	Mar. 7, 1957	148.9
Jan. 21, 1948	144.65	Dec. 24	148.8	Nov. 14	181.1
Mar. 2	143.90	Jan. 30, 1951	148.4	Mar. 18, 1959	172.1
July 14	148.3	Apr. 18	148.5	Nov. 13	185.1
Oct. 14	148.7	June 11	149.3	Mar. 10, 1960	148.4
Dec. 1	148.0	Aug. 20, 1952	150.15	Apr. 14	b169.9
Mar. 9, 1949	145.1				
8N/15W-24B3. Altitude about 2,679 ft. Depth 700 ft March 1956.					
Nov. 27, 1956	159.2	Nov. 14, 1957	181.0	Apr. 6, 1961	148.5
Dec. 18	159.0	Mar. 10, 1960	148.3	Oct. 18	151.6
Mar. 7, 1957	148.8	Oct. 28	146.3	May 7, 1962	141.90
8N/15W-27R1. Altitude 2,806.8 ft. Depth 220.0 ft April 16, 1962.					
Dec. 17, 1945	144.7	Dec. 18, 1946	141.4	July 25, 1950	142.4
Jan. 7, 1946	143.30	Feb. 28, 1947	141.3	Oct. 24	143.45
Jan. 23	143.35	Apr. 9	141.25	Jan. 30, 1951	144.1
Feb. 28	142.85	July 8	140.8	Apr. 18	143.7
Mar. 28	142.69	Nov. 18	140.25	June 11	143.9
Apr. 18	142.50	Dec. 8	139.95	Sept. 18	144.5
Apr. 30	142.35	Jan. 20, 1948	140.4	Dec. 3	145.2
May 6	142.30	Mar. 2	140.35	Apr. 30, 1952	145.9
May 14	142.25	July 14	a140	Aug. 20	146.2
May 21	142.20	Oct. 13	a140.7	Nov. 19	146.6
May 31	142.25	Nov. 29	140.5	Mar. 10, 1953	146.9
June 19	142.20	Mar. 9, 1949	142.2	June 10	147.1
July 5	142.3	July 13	140.95	Aug. 31	a147.2
July 15	141.88	Dec. 7	139.65	May 16, 1955	150.11
Oct. 4	141.60	Apr. 19, 1950	140.0	Apr. 16, 1962	166.00
Dec. 11	141.45				

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/15W-29M1. Altitude about 3,017 ft. Depth 45.5 ft April 16, 1962.					
Dec. 17, 1945	(f)	Oct. 4, 1946	(f)	June 12, 1947	152.95
Apr. 30, 1946	(f)	Jan. 9, 1947	184.0	July 3	157.7
May 21	(f)	Jan. 15	170.6	Aug. 7	164.2
June 5	178.3	Jan. 30	147.55	Sept. 4	168.5
June 13	174.6	Feb. 28	116.30	Oct. 2	172.3
June 19	173.95	Mar. 25	123.25	Nov. 18	177.75
June 26	174.3	Apr. 9	131.70	Dec. 8	180.7
July 5	175.25	Apr. 18	135.10	Jan. 20, 1948	(f)
July 15	176.35	May 14	144.6		
8N/15W-32E1. Altitude about 3,155 ft. Depth 170 ft in 1947.					
Oct. 23, 1957	130	Nov. 13, 1959	119.5	Apr. 5, 1962	129.3
Nov. 12	135	Mar. 8, 1960	120.0	Apr. 12	122.10
Mar. 13, 1958	122.2	Oct. 26	120.5	Nov. 8	122.0
Nov. 26	114.0	Apr. 6, 1961	132.5	Apr. 1, 1963	119.3
Mar. 17, 1959	118.2	Oct. 17	121.2		
8N/15W-33G1. Altitude about 2,930 ft. Depth 281.5 ft May 16, 1955.					
Jan. 23, 1946	194.0	July 8, 1947	198.6	Mar. 16, 1955	c234.1
Feb. 28	194.2	Aug. 7	198.7	Oct. 31	c239.6
Mar. 18	194.4	Sept. 4	198.8	Mar. 8, 1956	238.7
Apr. 18	194.7	Oct. 2	198.8	Nov. 26	240.5
Apr. 30	194.9	Nov. 18	198.7	Oct. 23, 1957	257.2
May 6	195.0	Dec. 8	199.0	Nov. 12	266
May 14	195.0	Jan. 20, 1948	200.9	Mar. 13, 1958	262.1
May 21	195.1	Feb. 25	200.8	Nov. 26	261.0
May 31	195.2	Apr. 30	200.8	Mar. 18, 1959	262.0
June 19	195.4	July 13	202.8	Nov. 12	284.0
July 5	195.7	Oct. 13	202.5	Mar. 9, 1960	249.3
July 15	195.7	Dec. 1	202.2	Oct. 28	269.2
Oct. 4	196.0	July 12, 1949	207.3	Apr. 6, 1961	272.6
Oct. 30	196.4	Apr. 19, 1950	206.75	Oct. 18	274.8
Dec. 11	197.1	June 10, 1953	222.0	Apr. 6, 1962	283.5
Dec. 18	197.4	Oct. 24	226.8	Apr. 16	c258.47
Feb. 28, 1947	197.7	Mar. 25, 1954	221.6	Nov. 13	252.0
Apr. 9	197.8	Nov. 12	233.26	Apr. 3, 1963	250.5

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/15W-34G1. Altitude about 2,860 ft. Depth 320 ft March 1947.					
1947	180	Nov. 26, 1958	203.0	Apr. 4, 1961	210.0
Dec. 1, 1948	178.75	Mar. 18, 1959	205.0	Oct. 20	205.7
Oct. 23, 1957	260	Nov. 13	205.6	Apr. 6, 1962	214.3
Nov. 19	216.0	Mar. 9, 1960	206.9	Nov. 13	208.5
Mar. 13, 1958	208.8	Oct. 28	208.4	Apr. 2, 1963	210.9
8N/15W-36M1. Altitude 2,885.5 ft. Depth 290 ft April 12, 1962.					
Feb. 18, 1943	80.4	Nov. 24, 1953	80.6	Nov. 27, 1958	88.6
Dec. 1	85.2	Mar. 25, 1954	80.7	Mar. 18, 1959	92.6
Apr. 25, 1944	81.4	Nov. 12	80.6	Nov. 13	90.0
Dec. 5	74.8	Mar. 16, 1955	81.4	Mar. 8, 1960	104.0
Nov. 13, 1945	75.4	Mar. 31	95.6	Oct. 28	92.6
Dec. 17	75.0	May 16	81.3	Apr. 6, 1961	93.4
Dec. 8, 1947	72.4	Mar. 8, 1956	82.4	Oct. 17	92.8
Dec. 9, 1949	84.6	Nov. 26	84.0	Apr. 2, 1962	98.4
Dec. 24, 1950	87.10	Mar. 7, 1957	76.6	Apr. 12	92.15
Dec. 3, 1951	89.50	Nov. 12	89.2	Nov. 13	91.4
Nov. 19, 1952	88.8	Mar. 13, 1958	86.4	Apr. 2, 1963	94.2
Nov. 19, 1953	87.8				
8N/16W-5N1. Altitude about 2,900 ft. Depth 224.5 ft April 3, 1962.					
Nov. 14, 1942	218.2	July 5, 1946	201.6	Sept. 18, 1951	197.45
Apr. 30, 1943	217.8	Oct. 17	200.8	Nov. 27	197.78
May 28	211.35	Dec. 11	200.35	Apr. 30, 1952	198.25
June 25	210.3	Feb. 28, 1947	199.75	Aug. 20	198.45
July 23	210.2	Apr. 9	199.25	Nov. 19	198.1
Aug. 20	210.4	July 8	198.5	Mar. 10, 1953	199.0
Sept. 24	210.7	Nov. 18	197.8	June 10	201.15
Dec. 1	211.3	Dec. 18	190.65	Aug. 31	200.65
Jan. 22, 1944	211.0	Jan. 20, 1948	197.45	Nov. 24	201.8
Apr. 25	209.7	Mar. 2	196.65	Mar. 25, 1954	202.6
May 4	209.0	July 13	196.8	Nov. 12	204.75
July 29	208.4	Oct. 13	196.3	Mar. 15, 1955	203.9
Oct. 28	207.75	Nov. 29	197.0	May 16	208.50
Dec. 6	207.4	Mar. 9, 1949	196.55	Oct. 31	207.3
Jan. 8, 1945	207.27	July 12	195.9	Mar. 8, 1956	217.1
Feb. 7	206.97	Sept. 21	196.1	Nov. 26	220.1
Mar. 9	206.50	Dec. 9	195.95	Mar. 6, 1957	246.7
May 7	205.85	Apr. 19, 1950	196.35	Nov. 13	243.5
June 28	205.50	July 25	196.50	Mar. 10, 1958	215.5
Oct. 7	205.25	Oct. 24	196.65	Aug. 26	224.2
Nov. 13	205.5	Jan. 30, 1951	196.75	Sept. 24	224.1
Jan. 8, 1946	203.1	Apr. 18	197.0	Nov. 25	217.5
Apr. 4	202.4	June 11	197.10	Apr. 3, 1962	(f)

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/16W-6G1. Altitude about 2,915 ft. Depth 1,007 ft April 2, 1962.					
June 18, 1956	317.1	Oct. 26, 1960	259.2	Apr. 9, 1962	266.2
Nov. 15, 1957	226.5	Apr. 5, 1961	273.8	Nov. 8	a399.0
Mar. 10, 1958	223.5	Oct. 18	242.0	Nov. 11	330
Nov. 25	222.0	Apr. 2, 1962	229.31	Apr. 2, 1963	250.3
Apr. 15, 1960	252.7				
8N/16W-6M1. Altitude about 2,927 ft. Depth 600 ft April 2, 1962.					
Oct. 2, 1956	228.5	Apr. 5, 1961	248.5	Nov. 11, 1962	245
Mar. 17, 1959	238.4	Apr. 2, 1962	238.77	Nov. 11	a272
Oct. 26, 1960	243.0				
8N/16W-8G1. Altitude about 2,910 ft. Depth 1,004 ft April 3, 1962.					
Nov. 16, 1959	279.0	Oct. 19, 1961	285.5	Apr. 9, 1962	290.8
Apr. 15, 1960	329.5	Nov. 11, 1962	301.5	Nov. 8	293.5
Oct. 26	328.5	Nov. 11	a381.5	Apr. 2, 1963	284.9
Apr. 5, 1961	339.4				
8N/16W-14K1. Altitude about 2,855 ft. Depth 150 ft 1909; 123 ft 1946.					
1909	110	Oct. 30, 1946	107.45	Feb. 25, 1948	109.8
Apr. 27, 1946	105.90	Dec. 11	107.3	Mar. 2	112.75
Apr. 30	106.05	Feb. 28, 1947	106.5	July 13	113.3
May 14	106.40	Apr. 9	106.1	Oct. 13	113.25
June 19	106.35	July 8	110.55	Nov. 29	113.6
July 5	106.40	Nov. 18	109.3	Mar. 9, 1949	112.8
July 15	107.20	Dec. 8	110.05	July 12	(f)
Oct. 4	107.60	Jan. 20, 1948	113.3	Nov. 1, 1960	(k)
8N/16W-14L1. Altitude about 2,859 ft. Depth 195 ft April 11, 1962.					
Nov. 13, 1945	105.5	Apr. 19, 1950	131.2	Mar. 17, 1959	119.0
Jan. 8, 1946	106.0	Nov. 21, 1952	121.3	Nov. 16	136.0
Jan. 23	110.77	June 10, 1953	128.7	Mar. 8, 1960	151.5
Feb. 28	110.9	May 6, 1955	127.3	Oct. 26	153.9
Apr. 18	b120.4	May 16	a127	Nov. 1	154.3
June 1	106.7	Mar. 8, 1956	135.0	Oct. 17, 1961	156.1
June 5	106.75	Nov. 26	115.5	Apr. 9, 1962	176.5
Dec. 8, 1947	b113.5	Nov. 14, 1957	134.5	Apr. 11	153.02
July 12, 1949	a120.1	Mar. 10, 1958	130.1	Nov. 8	157.0
Sept. 21	a128.95	Nov. 26	151.0	Apr. 1, 1963	151.0
Dec. 9	a129.10				

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/16W-14L2. Altitude about 2,865 ft. Depth 197.0 ft April 11, 1962.					
Apr. 5, 1961	134.3	Apr. 9, 1962	158.3	Nov. 8, 1962	136.2
Oct. 17	134.5	Apr. 11	133.05	Apr. 1, 1963	133.0
8N/16W-15N1. Altitude about 2,970 ft. Depth 265 ft April 4, 1962.					
Oct. 24, 1957	66.3	Mar. 8, 1960	51.2	Apr. 4, 1962	45.73
Nov. 14	57.6	Oct. 26	56.4	Nov. 8	44.3
Mar. 10, 1958	50.7	Apr. 5, 1961	70.3	Apr. 1, 1963	45.7
Nov. 25	36.0	Oct. 17	60.4		
Nov. 12, 1959	49.7				
8N/16W-18H1. Altitude about 2,995 ft. Depth 125 ft in 1922; 250 ft April 4, 1962.					
Nov. 14, 1942	102.1	Apr. 25, 1944	89.45	Dec. 11, 1946	93.3
Apr. 30, 1943	101.70	May 4	88.75	Dec. 8, 1947	94.2
May 28	96.22	July 29	85.2	Dec. 1, 1948	96.2
June 25	94.37	Oct. 28	88.7	Dec. 9, 1949	98.6
July 23	93.8	Dec. 6	89.3	Dec. 24, 1950	101.1
Aug. 20	93.4	Jan. 8, 1945	88.65	Nov. 20, 1952	105.7
Sept. 24	92.8	Feb. 7	89.35	June 4, 1953	108.6
Dec. 1	92.3	Mar. 9	90.00	Mar. 17, 1959	131.7
Jan. 22, 1944	91.75	Nov. 13	95.6	Nov. 8, 1962	124.9
8N/16W-18H2. Altitude about 2,987 ft. Depth 183 ft in 1950; 400 ft in October 1961.					
Nov. 26, 1956	159	Nov. 25, 1958	130.0	Nov. 18, 1961	210.0
Mar. 6, 1957	167.0	Nov. 12, 1959	131.4	Apr. 4, 1962	135.10
Nov. 14	161.2	Mar. 8, 1960	130.3	Apr. 9	134.9
Mar. 10, 1958	178.1	Oct. 26	130.4	Nov. 8	308.0
Oct. 7	120.4	Apr. 5, 1961	130.2		
8N/16W-22Q4. Altitude about 3,049 ft. Depth 152 ft April 10, 1962.					
June 20, 1956	43.9	Mar. 17, 1959	60.2	Oct. 17, 1961	67.3
Oct. 24, 1957	65.2	Nov. 12	74.6	Apr. 10, 1962	61.4
Nov. 12	65.5	Mar. 8, 1960	71.0	Apr. 10	35.04
Mar. 13, 1958	61.5	Oct. 26	76.2	Apr. 1, 1963	59.4
Nov. 25	56.2	Apr. 6, 1961	71.7		

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/16W-23G1. Altitude about 2,913 ft. Depth 106.0 April 11, 1962					
June 29, 1956	84.3	Mar. 8, 1960	83.9	Apr. 9, 1962	188.8
Nov. 12, 1957	93.7	Oct. 26	84.2	Apr. 11	84.79
Mar. 13, 1958	84.8	Apr. 6, 1961	84.9	Nov. 8	83.7
Nov. 26	82.9	Oct. 20	90.1	Apr. 1, 1963	80.0
Mar. 17, 1959	81.2				

8N/16W-26G1. Altitude about 3,080 ft. Depth 17.4 ft April 10, 1962.					
June 29, 1956	3	Nov. 12, 1959	3.9	Apr. 10, 1962	1.87
Nov. 12, 1957	4.6	Mar. 8, 1960	3.8	Apr. 10	5.6
Mar. 13, 1958	4.2	Oct. 26	4.5	Nov. 8	8.1
Nov. 25	3.7	Apr. 6, 1961	5.0	Apr. 1, 1963	2.8
Mar. 17, 1959	3.3	Oct. 17	4.1		

8N/16W-32L1. Altitude about 3,418 ft. Depth 119 ft in 1927.					
Mar. 1947	28	Jan. 16, 1951	93.1	Nov. 13, 1956	91.6
June 10	93.9	Dec. 19	95.2	Oct. 22, 1957	93.1
Dec. 30	81.5	Dec. 18, 1952	93.2	Nov. 10, 1958	88
Apr. 14, 1948	89.2	Apr. 17, 1953	88.3	Oct. 19, 1959	80.2
Dec. 21,	90.3	Dec. 8	93.7	Nov. 15, 1960	91.9
Apr. 19, 1949	89.8	Nov. 29, 1954	94.2	Nov. 13, 1961	93.4
Dec. 13	92.6	Oct. 19, 1955	91.45	Apr. 4, 1962	71.05

8N/17W-2N1. Altitude 2,987.5 ft. Depth 1,000 ft March 1948.					
Feb. 15, 1949	226	Aug. 19, 1954	a299	Oct. 18, 1961	279.0
Nov. 28, 1951	244.9	Mar. 10, 1958	243	Apr. 10, 1962	276.8
Aug. 19, 1953	247	Nov. 25	257	Nov. 9	278.0
Aug. 19	a271	Mar. 17, 1959	279	May 1, 1963	280.5
Aug. 19, 1954	268	Nov. 12	297		

8N/17W-11D1. Altitude about 2,993 ft. Depth 484 ft April 1945.					
May 10, 1947	223.73	Mar. 29, 1962	285.34	Nov. 9, 1962	289.6
Apr. 5, 1961	293.8	Apr. 5	285.9	Apr. 2, 1963	287.0

8N/17W-11E1. Altitude about 3,000 ft. Depth 770 ft April 1945.					
Aug. 19, 1953	272	Aug. 19, 1954	a342	Apr. 5, 1961	295.0
Aug. 19	a319	Apr. 15, 1960	200.4	Oct. 18	288.7
Aug. 19, 1954	283	Oct. 28	228.6	Mar. 29, 1962	(k)

See footnotes at end of table. B-27

Date	Water level	Date	Water level	Date	Water level
8N/17W-14E1. Altitude about 3,045 ft. Depth 64 ft in 1919.					
Mar. 9, 1945	30.5	Mar. 10, 1959	58.2	Oct. 18, 1961	(f)
Dec. 8, 1947	32.9	Nov. 12	53.4	Mar. 29, 1962	44.55
1948	37.6	Mar. 8, 1960	53.0	Apr. 5	43.2
Nov. 25, 1956	48.3	Oct. 28	55.9	Nov. 9	49.8
Mar. 10, 1958	58.1	Apr. 5, 1961	65.2	Apr. 2, 1963	52.0
8N/18W-17J1. Altitude about 3,430 ft. Depth 160 ft in 1943.					
June 9, 1952	57.3	Nov. 29, 1954	74.8	Oct. 19, 1959	63.7
Dec. 8	56.6	Nov. 13, 1956	64.55	Nov. 15, 1960	62.1
Aug. 28, 1953	66.0	Oct. 22, 1957	60.0	Nov. 13, 1961	64.5
Dec. 8	61.0	Nov. 10, 1958	82.6	Mar. 28, 1962	60.59
8N/18W-22B1. Altitude about 3,312 ft. Depth 66 ft March 28, 1962.					
May 6, 1947	12.3	Dec. 19, 1951	29.0	Nov. 13, 1956	b61.0
Jan. 6, 1948	21.55	June 9, 1952	37.8	Oct. 22, 1957	b63.5
Apr. 12	22.05	Dec. 8	29.9	Nov. 10, 1958	b69.7
Dec. 21	24.55	Apr. 17, 1953	29.0	Nov. 15, 1960	67.3
Apr. 19, 1949	22.9	Aug. 27	27.5	Nov. 13, 1961	48.9
Dec. 13	26.2	Dec. 8	27.7	Mar. 28, 1962	48.96
Jan. 9, 1951	26.95	May 19, 1955	34.9		
8N/18W-22B2. Altitude about 3,321 ft. Depth 24.2 ft March 28, 1962.					
May 6, 1947	5.7	Dec. 13, 1949	16.6	Apr. 17, 1953	12.6
Dec. 30	10.35	Jan. 9, 1951	18.05	Dec. 8	16.45
Apr. 12, 1948	12.9	Dec. 19	18.9	Nov. 29, 1954	13.6
Dec. 21	15.18	June 9, 1952	13.7	Oct. 19, 1955	17.95
Apr. 19, 1949	12.3	Dec. 8	13.1	Mar. 28, 1962	19.36
8N/18W-23F1. Altitude about 3,343 ft. Depth 224 ft October 19, 1959.					
Nov. 25, 1958	120.0	Oct. 26, 1960	122.2	Mar. 27, 1962	99.62
Mar. 17, 1959	84.3	Nov. 15	131.1	Apr. 10	92.7
Oct. 19	138	Apr. 5, 1961	105.8	Nov. 9	138.0
Nov. 12	115.0	Oct. 19	122.0	Apr. 2, 1963	92.7
Mar. 8, 1960	94.2	Nov. 13	117.0		

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/18W-24H1. Altitude about 3,340 ft. Depth 100 ft March 27, 1962.					
Aug. 27, 1953	12.7	Mar. 8, 1960	20.5	Mar. 27, 1962	a23.52
Nov. 13, 1957	15.2	Oct. 26	20.0	Apr. 10	23.5
Mar. 10, 1958	17.4	Apr. 5, 1961	19.0	Nov. 9	20.7
Nov. 25	15.5	Oct. 18	24.5	Apr. 2, 1963	20.8
Nov. 12, 1959	18.2				
9N/12W-30E1. Altitude about 2,350 ft. Depth 97 ft May 9, 1963.					
Apr. 13, 1951	54.26	Nov. 4, 1958	89.67	Mar. 2, 1960	90.90
Nov. 19, 1957	88.49	Mar. 9, 1959	86.63	Nov. 17	96.57
Mar. 10, 1958	84.35	Dec. 3	92.67	Feb. 28, 1961	(f)
9N/12W-31N1. Altitude 2347.2 ft. Depth 300 ft May 9, 1963					
Apr. 19, 1951	54.35	Sept. 3, 1952 a,j	99.3	Mar. 2, 1960	88.25
Jan. 30, 1952	47.28	Jan. 7, 1953	54.14	Nov. 17	104.47
Feb. 14	47.47	May 3, 1954	75.49	Feb. 28, 1961	94.37
Mar. 5	47.62	Oct. 18, 1956	106.48	Oct. 25	111.22
Apr. 4	50.26	Mar. 8, 1957	75.57	Mar. 1, 1962	91.85
May 5	55.35	Mar. 10, 1958	78.30	Nov. 9	111.64
June 2	60.58	Nov. 4	100.19	Mar. 13, 1963	104.30
July 3	66.39	Mar. 9, 1959	84.18	May 9	114.42
Aug. 4	a91.93	Dec. 3	99.77		
9N/13W-20H1. Altitude 2,416.5 ft. Depth 350 ft in 1920.					
May 30, 1921	37.1	May 8, 1925	40.8	Dec. 16, 1931	48.1
Oct. 3	37.75	July 21	41.7	Apr. 7, 1932	c52.1
Jan. 1, 1922	36.5	Jan. 9, 1926	38.4	Dec. 29	49.4
Apr. 29	35.9	May 13	40.45	Apr. 13, 1933	52.5
May 24	36.5	Aug. 20	42.7	Dec. 20	50.3
Oct. 17	38.4	Oct. 15	42.2	Apr. 19, 1934	53.7
Apr. 30, 1923	40.1	Jan. 19, 1927	40.9	Jan. 8, 1935	51.2
July 10	40.1	May 9	43.0	May 1	52.7
Aug. 8	40.3	Oct. 27	42.9	Dec. 13	52.5
Apr. 13, 1924	40.0	Apr. 26, 1928	43.7	Apr. 16, 1936	53.0
July 4	40.3	Nov. 18	43.5	Jan. 8, 1937	52.9
Oct. 23	38.6	Apr. 25, 1929	44.6	Apr. 22	54.0
Dec. 31	37.3	Dec. 5	44.82	Nov. 10	55.0
Feb. 10, 1925	37.3	Dec. 28	44.4	Mar. 8, 1938	55.6
May 5	40.3	Apr. 17, 1930	45.7	May 23	58.7

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
9N/13W-20H1--continued.					
Nov. 17, 1939	57.3	Apr. 30, 1943	62.3	Feb. 13, 1947	66.40
Mar. 13, 1940	57.3	May 28	62.95	Mar. 9	65.30
Dec. 6	c61.7	June 25	63.15	July 7	c78.90
Apr. 9, 1941	58.05	July 23	63.5	Nov. 19	74.30
Apr. 25	58.4	Aug. 26	63.75	Mar. 2, 1948	73.55
May 30	59.2	Sept. 24	63.93	July 14	80.65
July 18	60.07	Dec. 15	62.92	Oct. 14	82.35
July 27	60.49	Jan. 27, 1944	62.65	Dec. 1	77.6
Aug. 29	60.18	May 9	63.85	Mar. 8, 1949	77.05
Jan. 31, 1942	61.7	Dec. 6	64.65	July 12	c87.5
Feb. 13	60.2	Jan. 8, 1945	64.27	Sept. 21	c88.8
Mar. 28	60.15	Feb. 7	64.10	Nov. 29	c90.0
Apr. 21	61.0	Mar. 12	c64.35	Jan. 25, 1950	c91.1
Apr. 24	60.4	June 28	70.1	Apr. 18	89.75
May 29	60.8	Oct. 2	71.4	July 25	91.3
June 27	61.2	Nov. 7	67.95	Oct. 24	c93.24
July 31	61.7	Jan. 3, 1946	66.58	Jan. 30, 1951	90.15
Sept. 25	62.38	Jan. 7	66.53	Apr. 19	91.0
Oct. 23	61.7	Apr. 5	67.33	June 12	92.65
Nov. 24	61.0	July 3	69.9	Sept. 18	95.10
Dec. 26	59.6	Sept. 5	70.85	May 1, 1952	102.3
Jan. 30, 1943	61.4	Oct. 17	71.20	Mar. 11, 1953	125.7
Feb. 19	61.6	Nov. 1	71.35	May 16, 1955	c125.7
Mar. 26	61.9	Jan. 2, 1947	68.90	Mar. 5, 1963	228.72
Apr. 20	64.9				

9N/13W-20H2. Altitude 2,414.4 ft.

Dec. 3, 1941	59.4	Dec. 15, 1943	63.02	Jan. 3, 1946	66.81
Apr. 21, 1942	61.9	Dec. 6, 1944	65.35		

9N/13W-22R1. Altitude 2,378.0 ft. Depth 50 ft April 24, 1963

Nov. 14, 1957	93.8	Nov. 29, 1958	94.0	Nov. 17, 1959	97.0
Mar. 13, 1958	89.0	Mar. 18, 1959	99.1	Mar. 8, 1960	(f)

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
9N/13W-23B1. Altitude 2,399.6 ft. Depth 400 ft in 1942.					
Jan. 25, 1951	111.67	Feb. 14, 1952	116.41	Nov. 14, 1957	158.2
Jan. 25	c112.51	July 3	a139.0	Mar. 13, 1958	151.5
Mar. 5	c114.00	Aug. 4	145	Nov. 29	160.2
Apr. 11	c117.01	Sept. 3	a150.5	Mar. 8, 1960	167.6
May 8	117.78	Jan. 7, 1953	123.58	Oct. 25	177.0
June 29	c120.52	Nov. 1, 1955	160.2	Apr. 4, 1961	192.0
July 24	c122.43	Mar. 8, 1956	c155.4	Nov. 19	176.5
Dec. 22	120.56	Nov. 27	153.5	Apr. 24, 1963	176.34
Jan. 1, 1952	117.80	Mar. 7, 1957	139.0		

9N/13W-26E1. Altitude 2,374.2 ft. Depth 256 ft May 9, 1963.					
Apr. 15, 1960	103.2	Oct. 19, 1961	108.8	Nov. 14, 1962	110.0
Oct. 26	107.3	Apr. 4, 1962	103.8	Apr. 9, 1963	109.6
Apr. 5, 1961	105.5				

9N/13W-27N1. Altitude 2,393.3 ft. Depth 580 ft March 6, 1963.					
June 27, 1952	142	Aug. 15, 1957	220	Oct. 22, 1959	213.6
June 27	a166	Aug. 15	a255	Oct. 22	a242.9
Oct. 25, 1953	152	Aug. 30	222	July 2, 1960	240
Nov. 29	a155	Aug. 30	a242	July 2	a260
May 30, 1954	180	Aug. 7, 1959	220	Aug. 1962	244.6
May 31	a199	Aug. 7	a240	Aug.	a262.7

9N/13W-29E1. Altitude 2,426.0 ft. Depth 425 ft in May 1957.					
Oct. 9, 1957	232.5	Aug. 11, 1959	a315.9	Aug. 10, 1961	a334.9
Oct. 9	a318.4	Nov. 17	223.6	Oct. 19	d255.0
Nov. 14	194.5	Apr. 14, 1960	d228.8	Apr. 3, 1962	d261.0
Mar. 14, 1958	174.5	Oct. 11	242.2	July 27	260.4
July 30	228.8	Oct. 11	a304.5	July 27	a331.3
July 30	a321.2	Oct. 26	d239.5	Nov. 14	d269.8
Nov. 26	217.1	Apr. 5, 1961	d231.1	Apr. 9, 1963	d256.7
Aug. 11, 1959	235.6	Aug. 10	251.6	Aug. 6	270.0

9N/13W-29J1. Altitude 2,415.6 ft. Depth 390 ft in 1957.					
Oct. 20, 1957	178.7	Nov. 17, 1959	198.9	Oct. 19, 1961	d244.7
Mar. 14, 1958	162.4	Apr. 14, 1960	231.5	Apr. 3, 1962	d243.1
June 19	218.8	Oct. 26	d231.7	Nov. 14	d248.2
June 19	a235.0	Apr. 5, 1961	226.0	Mar. 7, 1963	238.90
Mar. 16, 1959	197.4	July 31	247.6	Apr. 9	243.2
July 15	a244.4	July 31	a268.8		

See footnotes at end of table.

Date	Water. level	Date	Water level	Date	Water level
9N/13W-35P1. Altitude 2,377.5 ft. Depth 350 ft May 13, 1963.					
Nov. 29, 1958	140.7	Oct. 25, 1960	184.4	Apr. 4, 1962	157.5
Mar. 18, 1959	143.8	Apr. 5, 1961	147.4	Nov. 14	151.6
Nov. 17	151.9	Oct. 19	146.9	Apr. 8, 1963	146.2
Mar. 8, 1960	144.6				
9N/13W-36G1. Altitude 2,353.9 ft. Depth 150 ft May 10, 1963.					
Nov. 29, 1958	77.25	Oct. 26, 1960	86.15	Nov. 14, 1962	92.05
Mar. 18, 1959	79.25	Apr. 5, 1961	86.25	Apr. 10, 1963	89.75
Nov. 17	82.75	Oct. 19	88.35	May 10	82.99
Mar. 8, 1960	83.45	Apr. 5, 1962	91.95		
9N/14W-15M1. Altitude 2,594.2 ft. Depth 700 ft April 25, 1957.					
Apr. 14, 1960	272.2	Oct. 19, 1961	320.3	Feb. 3, 1962	a289.8
Oct. 26	d294.5	Apr. 3, 1962	d329.4	Apr. 5, 1963	d300.9
Apr. 4, 1961	d295.6	Nov. 13	d290.8		
9N/14W-20B1. Altitude 2,656.4 ft. Depth 540 ft May 24, 1955.					
May 24, 1955	231.6	Oct. 26, 1960	273.4	May 8, 1962	279.64
?	249	Apr. 4, 1961	274.1	Nov. 13	280.1
?	a286.4	Oct. 19	278.3	Apr. 5, 1963	286.4
Apr. 14, 1960	269.7	Apr. 3, 1962	279.6		
9N/14W-21D1. Altitude 2,620.7 ft. Depth 600 ft June 28, 1962.					
Nov. 1955	242.1	Mar. 12, 1958	244.0	Nov. 13, 1962	273.0
Nov. 19, 1957	242.8	Nov. 16, 1959	254.4	Apr. 10, 1963	288.3
9N/14W-22A1. Altitude 2,544.3 ft. Depth 350 ft in 1953.					
Nov. 21, 1957	215.0	Apr. 4, 1961	250.4	Feb. 21, 1963	280
Nov. 16, 1959	229.9	Oct. 19	262.0	Feb. 21	a300
Apr. 14, 1960	d235.5	Apr. 3, 1962	d277.7	Apr. 5	d261.5
Oct. 28	244.7				

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
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9N/14W-24K1. Altitude about 2,480 ft. Depth 310 ft in 1941; 215.0 ft February 27, 1963.

Nov. 22, 1941	93.1	Dec. 13, 1950	126.4	Mar. 15, 1955	161.2
Aug. 10, 1943	101.7	Dec. 19, 1951	132.8	Nov. 1	176.1
Dec. 7	97.9	Dec. 4, 1952	136.4	Mar. 8, 1956	172.7
May 3, 1944	97.1	Nov. 25, 1953	154.5	Mar. 7, 1957	178.7
Dec. 10, 1946	101.65	Mar. 24, 1954	150.6	Feb. 27, 1963	(f)

9N/14W-24Q1. Altitude 2,477.5 ft. Depth 310 ft in 1941; 207.3 ft February 27, 1963.

Nov. 22, 1941	93.5	Dec. 19, 1951	121.7	Nov. 16, 1959	220.0
Aug. 10, 1942	97.9	Dec. 4, 1952	125.2	Mar. 8, 1960	204.6
Dec. 7	98.1	Nov. 25, 1953	n115.4	Oct. 26	(f)
May 3, 1944	97.98	Nov. 11, 1954	n108.2	Apr. 4, 1961	(f)
Mar. 12, 1945	97.7	Nov. 27, 1956	162.5	Oct. 19	207.9
Nov. 14	102.25	Mar. 7, 1957	181.5	Apr. 3, 1962	206.9
Dec. 10, 1946	102.4	Nov. 14	193.1	Nov. 14	205.8
Dec. 9, 1947	104.6	Mar. 12, 1958	187.6	Feb. 27, 1963	n144
Dec. 1, 1948	109.7	Nov. 26	196.9	Apr. 8	208.6
Dec. 2, 1949	115.2	Mar. 18, 1959	208.9		

9N/14W-27R1. Altitude 2,522.9 ft. Depth 400 ft in 1946.

Nov. 21, 1957	220.2	Mar. 8, 1960	232.0	Apr. 5, 1962	282.7
Mar. 12, 1958	p223.8	Oct. 28	d250.4	Nov. 14	281.0
Nov. 26	224.2	Apr. 4, 1961	264.0	Feb. 26, 1963	261.50
Nov. 17, 1959	233.5	Oct. 18	d268.0	Apr. 8	260.9

9N/14W-29M1. Altitude about 2,620 ft.

Nov. 22, 1941	171.9	Apr. 24, 1944	176.4	Oct. 2, 1945	176.9
Apr. 24, 1942	175.5	May 4	176.3	Nov. 14	176.8
Sept. 25	175.6	July 1	176.5	Jan. 7, 1946	176.9
Jan. 9, 1943	175.9	July 29	176.5	Apr. 4	176.78
Feb. 19	176.1	Oct. 28	176.6	July 3	176.85
Mar. 26	176.5	Nov. 28	176.6	Oct. 17	177.05
Apr. 30	177.1	Dec. 11	176.6	Dec. 11	176.9
May 28	178.4	Jan. 9, 1945	176.7	July 8, 1947	177.3
June 25	178.2	Feb. 7	176.7	Nov. 18	177.2
July 23	177.5	Mar. 12	176.7	Dec. 7, 1949	178.1
Aug. 20	176.8	May 7	176.8	Apr. 19, 1950	179.35
Sept. 24	176.3	June 28	176.7	Feb. 19, 1963	(k)
Dec. 7	176.5				

See footnotes at end of table. B-33

Date	Water level	Date	Water level	Date	Water level
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9N/14W-32C1. Altitude 2,587.5 ft. Depth 976 ft December 1955.

Mar. 8, 1956	201.0	Nov. 26, 1958	d229.9	Apr. 4, 1961	274.9
Nov. 27	225.4	Mar. 18, 1959	237.7	Oct. 18	271.4
Mar. 7, 1957	206	Nov. 17,	222.5	Apr. 5, 1962	d289.4
Nov. 19	208	Apr. 14, 1960	249.9	June	a339
Mar. 12, 1958	204.2	Oct. 26	263.9	Feb. 19, 1963	a339

9N/14W-32D1. Altitude 2,606.7 ft. Depth 500 ft in 1933.

Nov. 22, 1941	164.8	Jan. 8, 1945	166.5	Nov. 14, 1945	168.3
Apr. 24, 1942	165.2	May 7	b166.8	Jan. 7, 1946	167.8
Apr. 30, 1943	a180.1	June 28	170.2	Dec. 11	167.7
May 28	a179.55	Oct. 2	169.9	Apr. 10, 1947	167.6
Apr. 4, 1944	176.6				

9N/15W-25D1. Altitude 2,689.8 ft. Depth 344 ft June 10, 1946; 277.7 ft May 16, 1955; 148.4 ft May 3, 1962.

Jan. 21, 1948	227.2	Jan. 25, 1950	228.6	Mar. 15, 1955	232.2
Mar. 2	229.5	Apr. 18	230.1	May 16	245.28
July 14	230.2	June 28	(k)	Oct. 31	234.3
Dec. 1	228.0	June 10, 1953	230.6	Mar. 8, 1956	242.9
Mar. 9, 1949	223.7	Nov. 20	245.2	Nov. 27	264.0
July 12	227.5	Nov. 24	230.9	Mar. 6, 1957	(f)
Sept. 21	228.1	Mar. 24, 1954	232.7	May 3, 1962	(f)
Dec. 7	228.0	Nov. 12	231.85		

9N/16W-36A1. Altitude about 2,885 ft. Depth 1,085 ft. December 1955.

Dec. 1955	264	Nov. 26, 1958	255.5	Nov. 28, 1960	258.5
June 22, 1956	266.5	Mar. 18, 1959	256.5	Apr. 3, 1962	260.10
Nov. 15, 1957	254.1	Apr. 15, 1960	268.3		

9N/16W-36C1. Altitude about 2,925 ft. Depth 1,020 ft January 1956.

Jan. 1956	245	Mar. 8, 1960	261.8	Apr. 3, 1962	267.1
Nov. 20	275.0	Oct. 26	261.6	Nov. 8	265.8
Mar. 6, 1957	275.8	Apr. 6, 1961	263.3	Apr. 1, 1963	266.2
Nov. 13, 1959	261.8				

- a. Well being pumped.
- b. Well pumped recently.
- c. Nearby well being pumped.

- d. Nearby well pumped recently.
- e. Estimated.
- f. Dry.
- g. Measurement by outside agency or person.
- h. Automatic water-level recorder charts on file.
- j. Tape smeared.
- k. Well destroyed.
- m. Measurements published in California Department of Water Resources Bull. 39 series as being for well 7N/13W-17D1.
- n. Measurement to falling water, not water table.
- p. Measurement questionable.

APPENDIX C

TABLE 3. DRILLERS' LOGS OF WELLS

Table 3.--Drillers' logs of wells

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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6N/13W-4G1. Altitude about 2,805 ft. Drilled by R & C Drilling Co.
8-inch casing; perforated 22-262 ft.

Granite, decomposed -	31	31	Sandstone, hard ---	4	133
Rocks; sand, loose --	33	64	Rock -----	18	151
Boulders -----	15	79	Sand; boulders,		
Sand and rocks -----	3	82	loose-----	12	163
Rock -----	10	92	Sandstone -----	42	205
Sandstone, hard -----	3	95	Rock, fractured ---	51	256
Rock -----	18	113	Rock, hard -----	3	259
Boulders, loose -----	2	115	Rock, loose,		
Rock -----	14	129	fractured -----	5	264
			Rock, medium-hard -	9	273
			Rock, very hard ---	7	280

7N/13W-3E1. Altitude about 2,381 ft. Drilled by R. H. Orr.
12-inch casing to 75 ft, 10-inch to 400 ft; perforated 69-400 ft.

Soil -----	20	20	Sand -----	2	182
Sand -----	1	21	Clay -----	8	190
Clay -----	5	26	Sand -----	1	191
Sand -----	2	28	Clay -----	34	225
Clay -----	12	40	Sand -----	2	227
Sand -----	2	42	Clay -----	18	245
Clay -----	44	86	Sand -----	3	248
Sand -----	2	88	Clay -----	22	270
Clay -----	7	95	Sand -----	3	273
Sand -----	2	97	Clay and cement ---	37	310
Clay -----	15	112	Sand -----	5	315
Sand -----	2	114	Clay and cement ---	27	342
Clay -----	11	125	Sand -----	2	344
Sand -----	2	127	Clay -----	21	365
Clay -----	33	160	Sand -----	25	390
Sand -----	3	163	Clay -----	10	400
Clay -----	17	180			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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7N/13W-3N1. Altitude about 2,380 ft. 14-inch casing; perforated 200-550 ft.

Sand, surface -----	51	51	Clay -----	42	231
Clay, gray -----	19	70	Clay and gravel ---	22	253
Gravel with clay			Gravel -----	45	298
streaks -----	18	88	Clay and gravel ---	22	320
Sand and gravel -----	16	104	Clay; boulders;		
Clay -----	16	120	gravel -----	20	340
Sand with clay			Clay and gravel ---	92	432
streaks -----	13	133	Clay; boulders;		
Sand; gravel;			gravel -----	22	454
boulders -----	32	165	Sand and gravel ---	52	506
Clay -----	13	178	No record -----	44	550
Clay and gravel -----	11	189			

7N/13W-4J2. Altitude about 2,387 ft. Drilled by R. H. Orr.
14-inch casing to 101 ft, 10-inch to 460 ft; perforated 90-460 ft.

Soil -----	34	34	Clay -----	30	230
Sand -----	2	36	Sand -----	2	232
Clay -----	9	45	Clay -----	18	250
Sand -----	2	47	Sand -----	3	253
Clay -----	18	65	Clay -----	13	266
Sand -----	2	67	Sand -----	2	268
Clay -----	41	108	Clay -----	12	280
Sand -----	10	118	Sand -----	3	283
Clay -----	12	130	Clay -----	37	320
Sand -----	2	132	Sand -----	3	323
Clay -----	18	150	Clay -----	27	350
Sand -----	3	153	Sand -----	2	352
Clay -----	22	175	Clay -----	28	380
Sand -----	3	178	Sand -----	5	385
Clay -----	19	197	Cement and clay ---	75	460
Sand -----	3	200			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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7N/13W-4K2. Altitude about 2,392 ft. Drilled by R. H. Orr.
14-inch casing to 100 ft, 10-inch to 501.5 ft; perforated 90-501.5 ft.

Soil -----	40	40	Sand -----	1	251
Sand -----	1	41	Clay -----	44	295
Clay -----	9	50	Sand -----	2	297
Sand -----	2	52	Cement and clay ---	23	320
Clay -----	34	86	Sand -----	1	321
Sand -----	1	87	Clay -----	54	375
Clay -----	16	103	Sand -----	2	377
Sand -----	2	105	Cement and clay ---	23	400
Clay -----	14	119	Sand -----	2	402
Sand -----	8	127	Cement and clay ---	18	420
Clay -----	18	145	Sand -----	2	422
Sand -----	5	150	Cement and clay ---	28	450
Clay -----	35	185	Sand -----	1	451
Sand -----	2	187	Cement and clay ---	45	496
Clay -----	33	220	Sand -----	2	498
Sand -----	2	222	Cement and clay ---	3.5	501.5
Clay -----	28	250			

7N/13W-4M1. Altitude about 2,403 ft. Drilled by F. Rottman.
14-inch casing.

No record -----	10	10	Clay and gravel ---	10	300
Sand, fine -----	40	50	Clay and boulders -	15	315
Clay and sand -----	10	60	Sand, hard, gravelly	45	360
Sand, hard; boulders	10	70	Clay; gravel, hard	10	370
Clay -----	25	95	Boulders and gravel	5	375
Sand and gravel -----	5	100	Clay, sandy -----	10	385
Clay, hard -----	12	112	Sand, hard -----	10	395
Clay, hard, sandy ---	8	120	Boulders and gravel	5	400
Sand and boulders ---	25	145	Clay, hard -----	15	415
Boulders and clay ---	25	170	Sand, hard -----	13	428
Boulders -----	50	220	Clay, hard -----	7	435
Clay -----	5	225	Boulders and gravel	10	445
Sand, hard -----	15	240	Clay -----	5	450
Clay, sandy -----	15	255	Clay and gravel ---	20	470
Boulders -----	5	260	Gravel; sand; clay	20	490
Clay -----	10	270	Clay and gravel ---	10	500
Boulders and gravel -	10	280	Clay -----	10	510
Clay, hard -----	10	290			

7N/13W-4M1.--Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Boulders and gravel -	5	515	Sand, hard -----	20	700
Clay, hard; gravel --	15	530	Sand, hard; clay --	5	705
Gravel, hard-packed;			Clay and sand -----	45	750
boulders -----	10	540	Sand, fine; clay --	30	780
Sand, hard -----	25	565	Clay with small		
Sand and clay -----	25	590	boulders -----	70	850
Gravel and sand -----	50	640	Clay and gravel ---	10	860
Sand and clay -----	40	680	Gravel -----	30	890
			Hard formations ---	18	908

7N/13W-5D1. Altitude about 2,427 ft. Drilled by F. Rottman.
14-inch casing to 200 ft, 10-inch to 452 ft; perforated 200-452 ft.

No record -----	200	200	Clay -----	15	365
Clay -----	10	210	Clay, tough; rocks	7	372
Sand -----	2	212	Clay -----	8	380
Clay -----	16	228	Gravel, 2-inch		
Sand and boulders ---	7	235	diameter -----	2	382
Clay, tough -----	19	254	Clay -----	8	390
Sand -----	2	256	Boulders -----	2	392
Clay -----	16	272	Clay -----	26	418
Clay, tough -----	18	290	Sand and gravel ---	6	424
Clay -----	12	302	Clay -----	11	435
Clay and rocks -----	25	327	Rock and clay -----	5	440
Clay, tough -----	23	350	Sand -----	2	442
			Clay -----	10	452

7N/13W-5H2. Altitude about 2,408 ft. Drilled by F. Rottman.
14-inch casing; perforated 120-504 ft.

Sand -----	50	50	No record -----	50	300
Sand and gravel -----	30	80	Sand and clay -----	30	330
Clay and sand -----	20	100	Clay -----	20	350
Gravel and clay -----	25	125	Gravel and clay ---	50	400
Clay -----	25	150	Sand -----	30	430
Boulders and clay ---	30	180	Sand and clay -----	20	450
Sand and clay -----	20	200	Clay and gravel ---	30	480
Boulders and clay ---	30	230	Sand and clay -----	24	504
Sand -----	20	250			

Thickness Depth		Thickness Depth	
(feet)	(feet)	(feet)	(feet)

7N/13W-6A4. Altitude about 2,431 ft. Drilled by Evans Bros.
12-inch casing.

Sand, surface	40	40	Clay and boulders -	23	197
Sand with streaks of clay -----	23	63	Clay with streaks of sand; fine gravel	22	219
Sand, coarse; clay --	12	75	Sand; gravel; streaks of clay -	46	265
Sand; clay; fine gravel -----	11	86	Sand; gravel; boulders -----	45	310
Sand with streaks of clay -----	23	109	Sand and gravel ---	22	332
Sand; clay; occasional boulders -----	20	129	Clay; streaks of sand; gravel ----	23	355
Sand with streaks of clay -----	22	151	Sand and gravel ---	24	379
Sand, coarse with streaks of clay; boulders -----	23	174	Sand; gravel; streaks of clay -	21	400

7N/13W-6E1. Altitude about 2,455 ft. Drilled by Evans Bros.
14-inch casing to 760 ft; perforated 300-760 ft.

Soil, surface -----	20	20	Sand; streaks of clay -----	16	450
Sand, coarse; gravel	25	45	Sand -----	25	475
Sand; streaks of clay	42	87	Sand; streaks of clay -----	40	515
Sand -----	23	110	Clay; streaks of sand -----	20	535
Clay, sandy -----	22	132	Sand -----	25	560
Sand; streaks of clay	43	175	Sand; streaks of clay -----	95	655
Sand -----	65	240	Clay, sandy -----	10	665
Sand; streaks of clay	58	298	Sand; streaks of clay -----	35	700
Clay -----	22	320	Clay; streaks of sand -----	60	760
Sand -----	12	332			
Clay -----	18	350			
Sand; streaks of clay	30	380			
Clay; streaks of sand	54	434			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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7N/13W-6G1. Altitude about 2,446 ft. Drilled by Evans Bros.
14-inch casing; perforated 294-702 ft.

Sand -----	14	14	Sand; streaks of		
Gravel -----	11	25	gravel -----	9	420
Sand -----	49	74	Sand; streaks of		
Boulders -----	13	87	clay -----	16	436
Sand and gravel -----	31	118	Clay and boulders	22	458
Boulders -----	5	123	Clay -----	11	469
Sand; streaks of			Sand; streaks of		
gravel -----	55	178	gravel -----	6	475
Boulders -----	4	182	Clay; streaks of		
Sand; gravel; streaks			gravel -----	21	496
of clay -----	24	206	Boulders -----	3	499
Clay -----	12	218	Clay -----	13	512
Sand; streaks of			Sand; streaks of		
boulders -----	7	225	boulders -----	10	522
Sand, hard -----	5	230	Sand; streaks of		
Sand; streaks of			clay -----	9	531
boulders -----	20	250	Boulders -----	7	538
Sand; streaks of clay;			Clay and gravel ---	32	570
gravel -----	24	274	Sand and boulders -	12	582
Boulders and clay ---	20	294	Clay -----	6	588
Clay; streaks of			Boulders -----	3	591
gravel -----	31	325	Clay and gravel ---	13	604
Boulders and clay ---	86	411	No record -----	98	702

7N/13W-6L1. Altitude about 2,457 ft. Drilled by R & C Drilling Co.
14-inch casing; perforated 192-678 ft.

Gravel, surface -----	22	22	Sand, hard -----	8	265
Sand -----	30	52	Shell -----	2	267
Clay, sandy -----	42	94	Sand and gravel ---	45	312
Sand, coarse; clay --	46	140	Sand, hard -----	31	343
Sand, hard -----	29	169	Sand and gravel ---	41	384
Clay, sandy -----	41	210	Shell -----	2	386
Boulders -----	4	214	Clay -----	6	392
Sand, hard -----	18	232	Boulders -----	2	394
Clay -----	8	240	Sand -----	23	417
Boulders -----	4	244	Sand, hard -----	10	427
Gravel, hard -----	13	257	Boulders -----	2	429

7N/13W-6L1.--Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand, loose -----	6	435	Sand, hard -----	11	515
Sand, hard -----	23	458	Sand and gravel ---	91	606
Clay -----	16	474	Shell -----	4	610
Sand, hard -----	7	481	Sand and gravel ---	32	642
Shell -----	3	484	Shell -----	4	646
Boulders -----	2	486	Sand -----	16	662
Sand and gravel -----	18	504	Sand and gravel ---	12	674
			Clay, sandy -----	6	680

7N/13W-6P2. Altitude about 2,457 ft. Drilled by Evans Bros.
14-inch casing to 941 ft; perforated 398-941 ft.

Hardpan and sand ----	10	10	Sand; gravel;		
Sand, coarse -----	22	32	streaks of brown		
Sand and clay -----	18	50	clay -----	80	640
Clay; streaks of sand	52	102	Clay, white; thin		
Sand, thin streaks of			streaks of sand -	50	690
clay -----	28	130	Clay, white;		
Clay, brown -----	10	140	streaks of coarse		
Sand and gravel -----	60	200	sand -----	10	700
Clay, brown; sand			Sand and brown clay	80	780
and gravel -----	90	290	Sand, coarse; thin		
Clay, brown; thin			streaks of brown		
streaks of sand and			clay -----	50	830
gravel -----	90	380	Sand, coarse; small		
Sand and clay -----	180	560	gravel with thin		
			streaks of brown		
			clay -----	111	941

7N/13W-7A1. Altitude about 2,436 ft. Drilled by Evans Bros.
12-inch casing; perforated 335-500 ft.

Sand, surface -----	10	10	Clay, sticky -----	43	318
Clay, streaks of sand	58	68	Sand; gravel; and		
Sand -----	92	160	boulders -----	62	380
Sand, streaks of			Sand and clay	30	410
sandy clay -----	115	275	Boulders, small ---	10	420
			Sand; streaks of		
			clay -----	80	500

Thickness Depth		Thickness Depth	
	(feet)	(feet)	(feet)

7N/13W-7P1. Altitude about 2,447 ft. Drilled by F Rottman.
12-inch casing to 600 ft; perforated 198-600 ft.

Sand -----	60	60	Clay -----	30	320
Sand and clay -----	60	120	Clay and boulders -	34	354
Clay and boulders ---	40	160	Clay and gravel ---	96	450
Clay -----	40	200	Clay and boulders -	50	500
Clay and gravel -----	20	220	Clay and gravel ---	80	580
Clay and boulders ---	70	290	Clay and boulders -	20	600

7N/13W-8B1. Altitude about 2,428 ft. Drilled by F. Rottman.
14-inch casing to 852 ft; perforated 271-852 ft.

Soil, surface -----	32	32	Boulders and clay -	23	542
Clay and gravel -----	40	72	Clay and fine sand	23	565
Gravel; sand; clay --	38	110	Gravel and boulders	20	585
Gravel and sand -----	30	140	Clay, hard; and		
Clay and boulders ---	25	165	fine sand -----	22	607
Clay and sand -----	25	190	Clay; gravel; and		
Boulders -----	20	210	boulders -----	21	628
Sand and clay -----	25	235	Boulders -----	22	650
Boulders and clay ---	20	255	Boulders and sand -	25	675
Clay -----	20	275	Clay and gravel ---	20	695
Clay with gravel ----	45	320	No record -----	9	704
Clay and boulders ---	32	352	Clay; fine gravel -	15	719
Gravel -----	13	365	Gravel -----	22	741
Sand and boulders ---	22	387	Clay -----	24	765
Boulders -----	23	410	Gravel -----	7	772
Clay and boulders ---	42	452	Clay and fine sand	22	794
Sand and boulders ---	23	475	Gravel -----	21	815
Gravel and boulders -	44	519	Clay -----	17	832
			No record -----	20	852

Thickness Depth			Thickness Depth		
(feet) (feet)			(feet) (feet)		

7N/13W-8B2. Altitude about 2,406 ft. Drilled by F. Rottman.
6-inch casing.

Sand, coarse -----	40	40	Clay, light; coarse		
Sand and light clay	40	80	sand -----	20	260
Clay; very fine sand	20	100	Clay and sand -----	20	280
Clay and sand -----	20	120	Clay, heavy; light		
Clay, light; and fine			sand -----	40	320
sand -----	60	180	Clay; coarse sand -	60	380
Clay, light; coarse			Clay, small amount;		
sand -----	20	200	coarse sand -----	40	420
Sand, coarse -----	40	240	Sand, coarse -----	20	440

7N/13W-8M1. Altitude about 2,420 ft. Drilled by F. Rottman.
14-inch casing; perforated 250-752 ft.

Soil, surface -----	50	50	Rock, small -----	40	410
Gravel -----	10	60	Gravel and boulders	45	455
Clay -----	20	80	Sand, coarse -----	10	465
Sand, hard; clay ---	30	110	Sand -----	35	500
Clay and boulders --	55	165	Gravel and boulders	60	560
Sand, hard -----	35	200	Sand, hard -----	35	595
Boulders -----	30	230	Sand, coarse and		
Rock, fine; gravel -	20	250	gravel -----	45	640
Clay -----	20	270	Sand; gravel; clay	45	685
Gravel -----	35	305	Boulders and gravel	25	710
Gravel and boulders	35	340	Sand, coarse -----	25	735
Clay -----	15	355	Clay, hard -----	17	752
Sand, fine -----	15	370			

7N/13W-9B2. Altitude about 2,383 ft. Drilled by R. H. Orr.
16-inch casing to 113 ft, 10-inch to 502 ft; perforations 100-502 ft.

Soil -----	32	32	Sand -----	2	100
Sand -----	1	33	Clay -----	8	108
Clay -----	5	38	Sand -----	2	110
Sand -----	2	40	Clay -----	15	125
Clay -----	25	65	Sand -----	3	128
Sand -----	1	66	Clay -----	32	160
Clay -----	32	98	Sand -----	2	162

7N/13W-9B2.---Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay -----	3	165	Sand -----	2	292
Sand -----	5	170	Cement -----	33	325
Clay -----	30	200	Sand -----	2	327
Sand -----	3	203	Cement and clay ---	23	350
Clay -----	17	220	Sand -----	3	353
Sand -----	2	222	Cement and clay ---	67	420
Clay -----	6	228	Sand -----	3	423
Sand -----	4	232	Cement and clay ---	27	450
Clay -----	18	250	Sand -----	5	455
Sand -----	2	252	Cement -----	20	475
Cement -----	13	265	Sand -----	2	477
Sand -----	2	267	Cement -----	25	502
Cement -----	23	290			

7N/13W-9N2. Altitude about 2,395 ft. Drilled by F. Rottman.
12-inch casing to 345 ft; perforated 150-345 ft.

Surface formations --	140	140	Clay, soft; rock --	40	260
Sand and rock -----	2	142	Sand and boulders -	5	265
Clay and rock -----	18	160	Clay and rock -----	10	275
Clay, soft -----	9	169	Clay, soft -----	25	300
Clay and rock -----	9	178	Sand and boulders -	20	320
Sand -----	12	190	Clay, soft -----	25	345
Clay, soft -----	10	200			
Clay and rock -----	20	220			

7N/13W-10D1. Altitude about 2,375 ft. Drilled by R. H. Orr.
14-inch casing; perforated 90-445 ft.

Soil -----	21	21	Clay -----	16	156
Sand -----	1	22	Sand -----	3	159
Clay -----	19	41	Clay -----	17	176
Sand -----	2	43	Sand -----	2	178
Clay -----	17	60	Clay -----	42	220
Sand -----	2	62	Sand -----	3	223
Clay -----	23	85	Clay -----	27	250
Sand -----	5	90	Sand -----	3	253
Clay -----	30	120	Clay -----	27	280
Sand -----	3	123	Sand -----	6	286
Clay -----	11	134	Clay -----	29	315
Sand -----	6	140	Sand -----	4	319

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay -----	11	330	Cement and Clay ---	32	410
Sand -----	2	332	Sand -----	2	412
Clay -----	18	350	Cement and clay ---	8	420
Sand -----	3	353	Sand -----	3	423
Cement and clay -----	22	375	Cement and clay ---	22	445
Sand -----	3	378			

7N/13W-16A1. Altitude about 2,367 ft. Drilled by F. Rottman.
14-inch casing.

Sand and gravel, surface -----	73	73	Clay; fine gravel -	22	340
Sand and gravel -----	20	93	Clay and gravel ---	45	385
Sand; clay; shale ---	22	115	Clay; boulders and gravel -----	22	407
Clay and gravel -----	23	138	Clay and gravel ---	22	429
Sand, hard; clay ----	22	160	Clay -----	22	451
Clay and gravel -----	23	183	Gravel and clay ---	45	496
Clay and shale -----	22	205	Clay; fine gravel -	22	518
Sand, hard -----	23	228	Clay; coarse gravel	23	541
Gravel -----	23	251	Clay and boulders -	44	585
Gravel and sand -----	22	273	No record -----	23	608
Clay and gravel -----	45	318			

7N/13W-16B4. Altitude about 2,374 ft. Drilled by Evans Bros.
14-inch casing; perforated 287-535 ft.

Sand and gravel -----	30	30	Sand, fine; streaks of clay -----	20	300
Sand and clay -----	22	52	Sand, fine -----	20	320
Sand; gravel with streaks of clay ---	60	112	Sand, coarse; clay	40	360
Sand with fine streaks of clay ---	10	122	Clay with streaks of sand -----	86	446
Sand with streaks of clay -----	158	280	Sand and clay -----	44	490
			Sand, coarse; streaks of clay	45	535

7N/13W-16R1. Altitude about 2,362 ft. Drilled by F. Rottman.
8-inch casing; perforated 52-100 ft.

Clay -----	20	20	Gravel and sand ---	20	80
Clay and sand -----	20	40	Sand and clay -----	20	100
Gravel -----	20	60			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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7N/13W-17B1. Altitude about 2,401 ft. Drilled by R. H. Orr.
16-inch casing to 102 ft, 10-inch to 502 ft; perforated 120-502 ft.

Soil -----	38	38	Sand -----	2	247
Sand -----	1	39	Clay -----	28	275
Clay -----	6	45	Sand -----	5	280
Sand -----	2	47	Clay and cement ---	10	290
Clay -----	13	60	Sand -----	2	292
Sand -----	1	61	Clay and cement ---	33	325
Clay -----	19	80	Sand -----	2	327
Sand -----	14	94	Cement -----	13	340
Clay -----	31	125	Sand -----	2	342
Sand -----	2	127	Clay and cement ---	28	370
Clay -----	23	150	Sand -----	2	372
Sand -----	3	153	Cement -----	53	425
Clay -----	22	175	Sand -----	2	427
Sand -----	2	177	Cement -----	13	440
Clay -----	23	200	Sand -----	3	443
Sand -----	3	203	Clay, white -----	27	470
Clay -----	12	215	Sand -----	2	472
Sand -----	2	217	Clay -----	18	490
Clay -----	13	230	Sand -----	3	493
Sand -----	2	232	Clay -----	9	502
Clay -----	13	245			

7N/13W-17D2. Altitude 2,420.5 ft. Drilled by F. Rottman.
12-inch casing; perforated 168-504 ft.

Sand and clay -----	10	10	Clay and boulders -	17	195
Clay and boulders ---	25	35	Sand and boulders -	3	198
Sand and boulders ---	5	40	Clay -----	18	216
Clay -----	20	60	Sand -----	4	220
Sand and boulders ---	5	65	Clay and boulders -	10	230
Clay -----	10	75	Rock -----	3	233
Sand, hard -----	10	85	Clay, hard -----	3	236
Clay -----	25	110	Rock -----	6	242
Sand and gravel -----	5	115	Clay, soft -----	8	250
Clay and boulders ---	15	130	Sand and boulders -	5	255
Clay, soft -----	20	150	Clay, hard -----	15	270
Rock -----	6	156	Rock, white -----	4	274
Clay and boulders ---	19	175	Clay, hard -----	16	290
Sand and gravel -----	3	178	Clay and boulders -	20	310

7N/13W-17D2.--Continued.

Thickness Depth		Thickness Depth	
(feet) (feet)		(feet) (feet)	
Rock and sand -----	5 315	Clay and boulders -	23 415
Clay, soft -----	10 325	Sand and boulders -	3 418
Rock and sand -----	3 328	Clay -----	12 430
Clay -----	14 342	Sand and boulders -	6 436
Rock and sand -----	4 346	Clay, soft -----	14 450
Clay -----	19 365	Sand and boulders -	3 453
Sand and boulders ---	5 370	Clay, hard -----	17 470
Clay, soft -----	10 380	Sand and boulders -	3 473
Sand and boulders ---	4 384	Clay, hard -----	12 485
Clay -----	4 388	Clay and rock -----	5 490
Sand and boulders ---	4 392	Clay -----	15 505

7N/13W-18C2. Altitude about 2,445 ft. Drilled by F. Rottman.
12-inch casing to 600 ft; perforated 250-600 ft.

Sand, fine -----	4 4	Clay, hard -----	8 254
Sand, coarse; gravel	12 16	Sand, with clay	
Sand, coarse;		streaks -----	51 305
boulders -----	38 54	Sand, coarse;	
Sand, coarse, with		gravel -----	46 351
clay streaks -----	111 165	Clay -----	8 359
Sand, with clay		Sand, coarse; clay	126 485
streaks -----	60 225	Sand, hard-packed;	
Sand -----	2 227	clay -----	65 550
Clay, hard -----	3 230	Sand, with clay	
Sand, with clay		streaks -----	50 600
streaks -----	16 246		

7N/13W-19D1. Altitude about 2,470 ft. Drilled by F. Rottman.
10-inch casing; perforated 280-500 ft.

Sand -----	30 30	Gravel -----	12 354
Sand, hard -----	35 65	Clay and boulders -	30 384
Sand, hard; clay ---	55 120	Sand, hard -----	18 402
Clay -----	34 154	Gravel -----	8 410
Clay, sandy -----	43 197	Clay, sandy -----	32 442
Clay and boulders ---	33 230	Gravel -----	6 448
Clay -----	30 260	Clay -----	20 468
Gravel -----	13 273	Sand, hard -----	16 484
Clay and sand -----	37 310	Gravel -----	6 490
Clay -----	32 342	Clay -----	10 500

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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7N/13W-28Q1. Altitude about 2,437 ft. Drilled by R. H. Orr.
12-inch casing to 141 ft, 10-inch to 351 ft; perforated 137-351 ft.

Soil -----	69	69	Sand -----	2	228
Sand -----	2	71	Sandstone -----	19	247
Clay; granite -----	29	100	Sand -----	3	250
Sand -----	2	102	Sandstone -----	16	266
Clay -----	43	145	Sand -----	2	268
Sand -----	2	147	Sandstone -----	32	300
Clay -----	18	165	Sand -----	3	303
Sand -----	2	167	Sand and rock -----	20	323
Sandstone -----	17	184	Sand -----	3	326
Sand -----	2	186	Sand and rock -----	14	340
Clay -----	17	203	Sand -----	3	343
Sand -----	3	206	Sand and rock -----	8	351
Clay -----	20	226			

7N/13W-29P1. Altitude about 2,570 ft. Drilled by F. Rottman.
8-inch casing to 300 ft, 6-inch to 450 ft; perforated 300-450 ft.

No record -----	--	300	Clay -----	20	420
Clay and gravel -----	30	330	Clay and gravel ---	20	440
Sand, hard -----	30	360	Sand, hard -----	10	450
Sand, red; clay -----	40	400			

7N/13W-29Z1. Altitude about 2,525 ft. Drilled by R. H. Orr.
11-inch casing to 155 ft, 8 $\frac{1}{4}$ -inch to 390 ft; perforated 147-390 ft.

Soil -----	95	95	Sand -----	4	249
Sand -----	2	97	Granite, decomposed	36	285
Clay, hard; rock ----	23	120	Sand -----	3	288
Sand -----	4	124	Granite, decomposed	15	303
Clay and rock -----	21	145	Sand -----	2	305
Sand -----	2	147	Clay and rock -----	15	320
Clay and gravel -----	23	170	Sand -----	6	326
Sand -----	2	172	Rock and clay -----	22	348
Clay and gravel -----	18	190	Sand -----	2	350
Sand -----	2	192	Rock and clay -----	25	375
Clay -----	28	220	Sand -----	1	376
Sand -----	10	230	Rock -----	14	390
Granite, decomposed -	15	245			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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7N/14W-1K1. Altitude about 2,475 ft. Drilled by Evans Bros.
14-inch casing to 858 ft; perforated 363-858 ft.

Soil, surface -----	5	5	Sand, hard, with		
Sand; small gravel --	13	18	clay streaks ----	6	508
Clay -----	2	20	Sand -----	27	535
Sand, with thin			Sand, hard -----	7	542
streaks of sandy			Sand -----	6	548
clay -----	80	100	Sand, hard -----	26	574
Boulders, small, hard	1	101	Sand, with clay		
Sand, with streaks of			streaks -----	41	615
clay -----	59	160	Clay, sandy with		
Sand and gravel -----	50	210	streaks of sand -	30	645
Sand, with streaks of			Sand, coarse, with		
clay -----	60	270	thin streaks of		
Clay, sandy; streaks			clay -----	30	675
of sand -----	42	312	Clay, sandy, with		
Clay -----	7	319	streaks of coarse		
Sand; small gravel			sand -----	27	702
with streaks of			Sand, coarse, with		
clay -----	44	363	streaks of brown		
Clay, with streaks of			sandy clay -----	122	824
coarse sand -----	15	378	Clay, brown, sandy	14	838
Sand, coarse, with			Sand, with streaks		
streaks of clay ---	39	417	of clay -----	7	845
Sand, hard -----	5	422	Clay, with streaks		
Sand, coarse -----	68	490	of sand -----	8	853
Sand, with clay			Sand, hard -----	5	858
streaks -----	12	502			

7N/14W-1Q1. Altitude about 2,478 ft. Drilled by Evans Bros.
14-inch casing to 904 ft; perforated 346-904 ft.

Sand, surface	85	85	Clay; streaks of		
Sand, coarse, with			sand -----	278	560
streaks of clay ---	160	245	Sand, with thin		
Clay, sandy, with			streaks of gray		
streaks of sand ---	15	260	clay -----	50	610
Clay, with streaks of			Sand and clay -----	287	897
sand -----	22	282	Rock -----	7	904

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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7N/14W-13A1. Altitude about 2,467 ft. Drilled by F. Rottman.
12-inch casing to 519 ft; perforated 249-519 ft.

Sand and clay -----	60	60	Boulders and gravel	20	340
Sand and gravel -----	10	70	Clay -----	20	360
Clay -----	25	95	Boulders and gravel	10	370
Clay and gravel -----	35	130	Clay, hard -----	30	400
Clay -----	30	160	Gravel, hard-packed	15	415
Sand, hard -----	20	180	Clay -----	20	435
Clay -----	40	220	Sand and gravel ---	15	450
Sand -----	30	250	Clay -----	30	480
Clay -----	20	270	Sand and gravel ---	35	515
Rock and gravel -----	20	290	Clay -----	4	519
Clay, hard -----	30	320			

7N/14W-13L1. Altitude about 2,491 ft. Drilled by F. Rottman.
6-inch casing to 400 ft.

Sand -----	60	60	Sand; clay; boulders	50	200
Sand and clay -----	20	80	Sand, coarse -----	40	240
Sand; shale; boulders	40	120	Sand, coarse;		
Sand, coarse -----	30	150	boulders -----	60	300
			Clay and sand -----	100	400

7N/14W-15H1. Altitude about 2,565 ft. Drilled by F. Rottman.
14-inch casing to 624 ft.

No record -----		200	Sand, coarse; pea		
Clay -----	100	300	gravel -----	260	600
Sand, coarse -----	20	320	No record -----	24	624
Sand, coarse; clay --	20	340			

7N/14W-23P1. Altitude about 2,690 ft.

Sand and clay -----	859	859	Sand, hard -----	47	1,079
Sand, hard -----	155	1,014	Clay -----	11	1,090
Sand; granite -----	2	1,016	Igneous formation	2,056	3,146
Sand, hard -----	12	1,028	Granite -----	7	3,153
Clay, sandy -----	4	1,032			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/13W-3M1. Altitude about 2,400 ft. Drilled by Evans Bros.
14-inch casing to 765 ft; perforated 350-765 ft.

Hardpan -----	5	5	Sand, hard -----	25	335
Sand -----	25	30	Sand, with streaks		
Sand, with streaks of			of clay -----	165	500
clay -----	35	65	Clay, tough, sticky	5	505
Sand, with streaks of			Sand, with streaks		
chalky clay -----	25	90	of clay -----	95	600
Sand -----	90	180	Clay -----	20	620
Sand, with streaks of			Sand, with streaks		
clay -----	70	250	of clay -----	125	745
Sand, coarse, with			Sand, coarse; light		
streaks of clay ---	40	290	clay -----	10	755
Clay, with streaks of			Gravel and boulders	10	765
sand -----	20	310			

8N/13W-4Q1. Altitude about 2,410 ft. Drilled by Evans Bros.
14-inch casing to 687 ft; perforated 327-687 ft.

Soil, surface -----	20	20	Clay, sandy, with		
Sand and clay -----	40	60	streaks of gravel	80	490
Clay, with streaks of			Clay, hard, with		
gravel -----	30	90	streaks of shale	25	515
Sand, coarse; gravel	70	160	Clay, with streaks		
Sand, with streaks of			of hard sand ----	45	560
clay -----	90	250	Clay, with streaks		
Clay -----	30	280	of sand -----	20	580
Clay, sandy -----	35	315	Sand, hard -----	20	600
Clay, with streaks of			Sand, hard, coarse	30	630
sand -----	65	380	Sand, hard -----	15	645
Clay, sticky -----	30	410	Rock -----	42	687

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/13W-6G2. Altitude about 2,448 ft. Drilled by F. Rottman.
Perforated 264-690 ft.

Sand and gravel -----	76	76	Sand and gravel ---	60	526
Sand; boulders; clay	30	106	Sand; fine gravel -	30	556
Rocks; coarse sand --	30	136	Sand and gravel ---	30	586
Sand and gravel -----	90	226	Sand; gravel; rock	30	616
Clay -----	30	256	Rocks; tight sand -	30	646
Sand and gravel -----	150	406	Sand, hard; rocks -	30	676
Rocks, hard; sand ---	30	436	Sand, firm, with		
Sand and boulders ---	30	466	hard streaks ----	24	700

8N/13W-6H2. Altitude about 2,422 ft. Drilled by Evans Bros.
14-inch casing to 702 ft; perforated 300-702 ft.

Soil, surface -----	8	8	Clay, brown, with		
Sand, coarse -----	18	26	streaks of fine		
Sand, medium, with			sand -----	151	434
brown clay -----	70	96	Sand, cemented;		
Clay, brown, with			some gravel -----	4	438
some medium sand --	47	143	Clay, brown; fine		
Sand, with streaks of			sand -----	42	480
brown clay -----	43	186	Sand, fine, with		
Clay, brown, with			streaks of brown		
streaks of sand ---	24	210	clay -----	28	508
Sand, hard, with brown			Sand, medium, with		
clay -----	57	267	streaks of brown		
Sand, fine, hard, with			clay -----	40	548
streaks of brown			Sand and clay -----	39	587
clay -----	16	283	Sand, fine to		
			medium, with		
			streaks of brown		
			clay -----	50	637
			Sand, fine to medium	65	702

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/13W-6Q1. Altitude about 2,453 ft. Drilled by Evans Bros.
14-inch casing to 510 ft; perforated 310-510 ft.

Sand, surface -----	10	10	Sand; streaks of		
Sand; streaks of clay	30	40	clay -----	70	400
Sand -----	25	65	Sand -----	23	423
Sand; streaks of clay	50	115	Sand; streaks of		
Sand -----	60	175	hard clay -----	35	458
Sand; streaks of clay	25	200	Sand, hard -----	9	467
Sand -----	85	285	Sand -----	28	495
Clay; streaks of hard			Rock -----	102	597
sand -----	45	330			

8N/13W-6R1. Altitude about 2,447 ft. Drilled by R. H. Orr.
8-inch casing to 119 ft; 5-inch to 301 ft, perforated 118.5-301 ft.

Soil and sand -----	72	72	Clay -----	4	209
Water -----	1	73	Water -----	6	215
Clay -----	27	100	Clay -----	31	246
Water -----	1	101	Water -----	5	251
Clay -----	4	105	Cement -----	1	252
Water -----	1	106	Water -----	1	253
Clay -----	16	122	Cement -----	25	278
Water -----	2	124	Water -----	2	280
Clay -----	44	168	Clay, tough -----	14	294
Water -----	2	170	Water -----	2	296
Clay -----	25	195	Clay, tough -----	5	301
Water -----	10	205			

8N/13W-7A1. Altitude about 2,449 ft. Drilled by F. Rottman.
14-inch casing; perforated 140-343 ft.

Sand, surface -----	70	70	Sand and gravel ---	2	177
Sand, hard -----	65	135	Clay and rock -----	41	218
Clay -----	5	140	Sand and boulders -	5	223
Sand and rock -----	3	143	Clay -----	32	255
Sand, hard -----	5	148	Rock -----	20	275
Sand and rock -----	5	153	Clay and rock -----	45	320
Clay and boulders ---	22	175	Rock -----	23	343

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/13W-7B1. Altitude about 2,453 ft. Drilled by Evans Bros.
14-inch casing to 496 ft; perforated 320-496 ft.

Hardpan -----	9	9	Clay and sand -----	56	351
Sand and gravel -----	41	50	Sand; gravel, with		
Sand -----	70	120	streaks of clay -	19	370
Sand; gravel, with			Sand, hard -----	11	381
streaks of clay ---	35	155	Boulders	1	382
Sand, with thin			Clay, with streaks		
streaks of brown			of sand; small		
sandy clay -----	77	232	boulders; hard		
Clay, with streaks			sand -----	110	492
of sand -----	28	260	Rock, hard -----	4	496
Clay, brown and gray,					
with streaks of					
sand -----	35	295			

8N/13W-7D1. Altitude about 2,458 ft. Drilled by J. Miller.
14-inch casing; perforated 78-120 ft, 124-144 ft, 215-240 ft.

Topsoil and clay ---	11	11	Gravel, poor -----	6	156
Sand, dry -----	3	14	Clay -----	3	159
Clay -----	37	51	Sand, poor -----	3	162
Sand, dry; gravel ---	27	78	Clay -----	18	180
Sand; coarse gravel -	21	99	Sand -----	5	185
Sand and gravel -----	21	120	Concrete -----	30	215
Clay -----	4	124	Sand and gravel ---	25	240
Sand -----	20	144	Concrete -----	25	265
Clay -----	6	150			

8N/13W-8D3. Altitude about 2,437 ft. Drilled by Evans Bros.
14-inch casing to 500 ft; perforated 340-500 ft.

Hardpan -----	3	3	Sand, coarse -----	267	327
Sand -----	27	30	Gravel and boulders;		
Sand and clay -----	10	40	streaks of clay -	138	465
Sand, coarse; streaks			Clay, gray with hard		
of clay -----	20	60	layers of shale -	30	495
			No record -----	75	570

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/13W-10D2. Altitude about 2,402 ft. Drilled by F. Miller.
14-inch casing; perforated 228-540 ft.

Loam, sandy -----	10	10	Clay -----	10	300
Sand -----	30	40	Sand -----	50	350
Clay -----	10	50	Sand and clay -----	20	370
Sand -----	30	80	Gravel -----	20	390
Clay -----	10	90	Sand -----	30	420
Sand, fine -----	30	120	Clay -----	10	430
Sand and clay -----	10	130	Sand and clay -----	20	450
Sand, hard -----	20	150	Sand -----	40	490
Clay -----	10	160	Sand, hard -----	10	500
Sand and gravel -----	50	210	Sand, loose -----	10	510
Clay -----	10	220	Sand and clay -----	20	530
Sand and gravel -----	40	260	Sand -----	5	535
Clay and sand -----	30	290	Clay -----	5	540

8N/13W-11E1. Altitude about 2,386 ft. Drilled by R. H. Orr.
16-inch casing; perforated 100-372 ft.

Soil -----	22	22	Sand -----	4	224
Sand -----	1	23	Clay -----	26	250
Clay -----	17	40	Sand -----	3	253
Sand -----	2	42	Clay -----	17	270
Clay -----	8	50	Sand -----	2	272
Sand -----	2	52	Clay and cement ---	28	300
Clay -----	38	90	Sand -----	4	304
Sand -----	3	93	Clay and cement ---	16	320
Clay -----	9	102	Sand -----	3	323
Sand -----	3	105	Clay -----	32	355
Clay -----	25	130	Sand -----	2	357
Sand -----	3	133	Clay -----	18	375
Clay -----	17	150	Sand -----	2	377
Sand -----	2	152	Clay and cement ---	23	400
Clay -----	23	175	Sand -----	3	403
Sand -----	2	177	Clay and cement ---	17	420
Clay -----	28	205	Sand -----	3	423
Sand -----	3	208	Clay and cement ---	22	445
Clay -----	12	220	Sand -----	3	448
			Clay and cement ---	4	452

Thickness Depth		Thickness Depth	
(feet)	(feet)	(feet)	(feet)

8N/13W-11M1. Altitude about 2,386 ft. Drilled by Evans Bros.
12-inch casing to 600 ft; perforated 300-600 ft.

Sand, surface -----	15	15	Sand and gravel, with streaks of clay -----	19	494
Sand, with streaks of gravel -----	235	250	Sandstone, with streaks of clay -	86	580
Sand, with streaks of clay and gravel ---	203	453	Clay, red; occasional boulders -----	132	712
Clay, with streaks of sand -----	22	475	Rock, hard -----	8	720

8N/13W-17E1. Altitude about 2,444 ft. Drilled by F. Rottman.
14-inch casing to 200 ft; 12-inch to 471 ft, perforated 190-471 ft.

Soil, sandy -----	6	6	Sand -----	1	268
Sand, hard -----	18	24	Clay -----	11	279
Clay; coarse sand ---	36	60	Gravel and boulders	8	287
Sand, hard -----	60	120	Clay -----	10	297
Shale, hard; clay ---	13	133	Rock and clay -----	12	309
Rock -----	2	135	Rock -----	9	318
Clay, tough; rocks --	61	196	Rock and clay -----	17	335
Clay -----	10	206	Clay -----	48	383
Gravel -----	20	226	Clay and rock -----	6	389
Clay -----	1	227	Clay, hard -----	14	403
Rock -----	1	228	Gravel -----	2	405
Clay -----	10	238	Clay -----	25	430
Sand -----	2	240	Clay, rocky -----	10	440
Clay -----	15	255	Clay -----	13	453
Sand -----	2	257	Rock and boulders -	9	462
Clay -----	10	267	Rock -----	9	471

8N/13W-17E2. Altitude about 2,443. Drilled by F. Rottman.
16-inch casing to 577 ft; perforated 273-597 ft.

Soil, surface -----	25	25	Sand, coarse, with pea gravel -----	13	120
Clay and sand -----	30	55	Rocks and coarse gravel -----	18	138
Sand, with clay streaks -----	30	85	Rocks; sand; clay -	13	151
Sand, coarse -----	22	107			

8N/13W-17E2.---Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay and sand -----	22	173	Sand, fine, with		
Clay, hard -----	45	218	streaks of clay	22	448
Sand, firm -----	12	230	Sand, and hard clay		
Sand, with clay			streaks -----	22	470
streaks -----	20	250	Clay, soft, and		
Clay and sand streaks	13	263	sand -----	22	492
Sand and coarse			Sand, fine; clay --	9	501
gravel -----	17	280	Clay and some sand	14	515
Rocks; sand and clay			Gravel, fine -----	15	530
streaks -----	26	306	Clay and fine		
Sand and gravel -----	34	340	gravel -----	7	537
Gravel, sandy, fine -	22	362	Sand and gravel ---	14	551
Clay, soft, and sand	21	383	Sand and coarse		
Clay; shale and fine			gravel -----	14	565
gravel -----	21	404	Sand; gravel; clay	8	573
Rocks; clay and sand	22	426	Clay and sand -----	15	588
			Clay, hard -----	9	597

8N/13W-17F1. Altitude about 2,438 ft. Drilled by F. Rottman.
14-inch casing; perforated 250-570 ft.

Soil, surface -----	66	66	Gravel and streaks		
Gravel, fine -----	22	88	of shale -----	23	336
Gravel -----	22	110	Gravel; boulders		
Gravel and streaks			and clay -----	22	358
of clay -----	23	133	Sand, hard-packed;		
Clay and gravel -----	22	155	clay -----	22	380
Gravel, coarse -----	23	178	Sand, hard -----	23	403
Sand, hard-packed ---	22	200	Sand, hard-packed;		
Sand and clay -----	23	223	boulders -----	23	426
Gravel and boulders -	23	246	Sand, hard; rock -	22	448
Boulders and gravel -	22	268	Sand, fine-packed	23	471
Clay and gravel -----	22	290	Gravel, fine; clay		
Clay and coarse gravel	23	313	streaks -----	22	493
			Gravel, hard, sandy	23	516
			Sand, hard -----	22	538
			Clay, hard -----	22	560

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/13W-17J1. Altitude about 2,421 ft. Drilled by F. Rottman.
16-inch casing to 845 ft, perforated 400-700 ft, 790-835 ft.

Soil, surface-----	100	100	Clay -----	21	526
Sand, with clay			Gravel -----	17	543
streaks -----	93	193	Clay -----	17	560
Sand, coarse -----	45	238	Gravel and clay		
Gravel -----	16	254	streaks -----	34	594
Clay -----	30	284	Gravel -----	20	614
Gravel -----	17	301	Clay -----	21	635
Gravel and clay			Gravel -----	13	648
streaks -----	48	349	Boulders and sand -	13	661
Clay -----	22	371	Clay and boulders -	17	678
Gravel -----	13	384	Shale, blue, with		
Clay -----	17	401	gravel streaks --	28	706
Gravel -----	14	415	Shale, blue -----	111	817
Sand and clay -----	22	437	Gravel, water -----	71	888
Gravel -----	14	451	Boulders -----	53	941
Clay -----	9	460	Shale, hard, blue -	4	945
Shale, hard -----	19	479			
Boulders -----	13	492			
Gravel -----	13	505			

8N/13W-17M1. Altitude about 2,443 ft. Drilled by F. Rottman.
14-inch casing; perforated 150-477 ft.

No record -----	65	65	Clay, hard-----	8	326
Sand, gravel -----	5	70	Clay and boulders -	10	336
Sand, hard -----	20	90	Sand and boulders -	8	344
Clay -----	15	105	Clay, soft -----	10	354
Sand -----	5	110	Sand -----	3	357
Clay and rock -----	50	160	Clay and boulders -	9	366
Clay -----	20	180	Clay, soft -----	24	390
Sand, hard -----	50	230	Clay and rock -----	20	410
Sand -----	3	233	Sand -----	5	415
Clay and boulders ---	21	254	Clay, soft -----	10	425
Sand -----	4	258	Sand -----	3	428
Clay -----	12	270	Clay, soft -----	17	445
Clay and boulders ---	20	290	Clay and rock -----	15	460
Sand and gravel -----	5	295	Sand -----	4	464
Clay and boulders ---	23	318	Clay and rock -----	13	477

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/13W-18N1. Altitude about 2,462 ft. Drilled by F. Rottman.
12-inch casing to 480 ft; perforated 240-480 ft.

Soil, surface -----	60	60	Clay and boulders -	25	285
Sand and gravel -----	40	100	Sand and gravel ---	30	315
Clay and gravel -----	25	125	Clay and sand -----	25	340
Gravel and sand -----	20	145	Clay and gravel ---	30	370
Clay and gravel -----	25	170	Clay and boulders -	20	390
Clay, sandy -----	20	190	Clay and gravel ---	25	415
Gravel -----	25	215	Rock -----	25	440
Sand, fine -----	20	235	Rock and clay -----	20	460
Clay and gravel -----	25	260	Rock -----	20	480

8N/13W-18N2. Altitude about 2,460 ft. Drilled by Evans Bros.
14-inch casing to 499 ft; perforated 399-499 ft.

Sand, surface -----	30	30	Clay and boulders -	16	286
Clay -----	17	47	Gravel and fine		
Sand, fine; clay ----	12	59	sand -----	14	300
Gravel -----	12	71	Clay -----	10	310
Gravel, with streaks			Gravel, fine -----	10	320
of clay -----	26	97	Clay, with streaks		
Sand, fine; boulders	24	121	of fine gravel --	10	330
Gravel and boulders -	17	138	Gravel, fine -----	30	360
Gravel and boulders -	23	161	Gravel -----	20	380
Gravel -----	16	177	Gravel, with streaks		
Gravel, with streaks			of clay -----	40	420
of clay -----	18	195	Gravel -----	15	435
Boulders and sand ---	15	210	Gravel, with streaks		
Clay -----	20	230	of clay -----	15	450
Gravel -----	16	246	Gravel and shale --	32	482
Clay -----	13	259	Rock -----	17	499
Gravel -----	11	270			

8N/13W-18Q1. Altitude 2,447.5 ft. Drilled by F. Rottman.
16-inch casing; perforated 290-600 ft.

Sand and clay -----	10	10	Rocks; clay and		
Clay and gravel -----	25	35	gravel -----	25	72
Sand; gravel and clay	12	47	Sand; gravel and		
			rocks -----	41	113

8N/13W-18Q1.--Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Boulders and clay ---	34	147	Clay, soft, sandy -	9	344
Clay and gravel -----	13	160	Sand, hard -----	6	350
Clay and sand -----	11	171	Clay, hard, sandy -	21	371
Gravel, fine, sandy -	19	190	Sand, hard-packed -	9	380
Clay and gravel -----	25	215	Clay, soft -----	9	389
Gravel, fine -----	15	230	Gravel, fine -----	16	405
Sand; gravel and clay streaks -----	35	265	Sand; gravel and clay streaks ----	65	470
Sand and gravel -----	5	270	Rock; sand and gravel -----	15	485
Rock; sand and clay streaks -----	8	278	Sand and clay streaks -----	33	518
Sand, hard and rocks	34	312	Gravel, fine -----	7	525
Sand and clay streaks	8	320	Sand, hard -----	75	600
Sand, hard -----	15	335			

8N/13W-18Q2. Altitude about 2,453 ft. Drilled by F. Rottman.
14-inch casing; perforated 255-533 ft.

Soil and clay -----	20	20	Clay, fine, sandy -	38	309
Gravel -----	10	30	Boulders -----	10	319
Clay, sandy -----	20	50	Clay and gravel ---	21	340
Clay -----	25	75	Clay, hard -----	21	361
Clay and fine sand --	33	108	Sand, hard, sharp -	9	370
Sand, coarse -----	12	120	Clay and sand -----	9	379
Clay -----	27	147	Clay, sticky -----	30	409
Clay, sandy -----	13	160	Clay and gravel ---	31	440
Clay, soft -----	19	179	Clay, hard, sandy -	50	490
Clay and fine sand --	21	200	Boulders and clay -	12	502
Sand, coarse and clay streaks -----	36	236	Clay and fine sand	28	530
Boulders, hard, volcanic -----	14	250	Clay, hard, brown; colored rock ----	3	533
Clay and gravel -----	21	271			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/13W-19C1. Altitude about 2,456 ft. Drilled by Evans Bros.
14-inch casing; perforated 216-507 ft.

Sand, surface -----	50	50	Rocks; sand and		
Sand and boulders ---	25	75	gravel -----	40	340
Gravel -----	15	90	Sand; gravel and		
Sand and gravel -----	25	115	streaks of clay	40	380
Sand; gravel and some			Sand; gravel and		
boulders -----	75	190	little clay ----	40	420
Sand, coarse -----	20	210	Sand, hard-packed		
Clay and streaks of			and gravel -----	40	460
sand -----	50	260	Sand; streaks of		
Clay and some boulders	20	280	clay and boulders	20	480
Sand and gravel -----	20	300	Gravel and boulders	12	492
			Boulders, large and		
			fine sand	11	503
			Boulders, large	4	507

8N/13W-20B1. Altitude about 2,430 ft. 16-inch casing; perforated
232-610 ft.

Sand, surface -----	46	46	Gravel, fine and		
Sand and coarse			clay -----	23	339
gravel -----	21	67	Clay, with sandy		
Gravel, coarse -----	24	91	streaks -----	22	361
Clay and fine gravel	22	113	Clay and sand -----	23	384
Clay and fine sand --	23	136	Gravel, fine and		
Gravel, fine and clay			clay -----	22	406
streaks -----	22	158	Clay, hard, sandy -	23	429
Gravel and clay -----	23	181	Clay -----	22	451
Clay; gravel and some			Gravel; sand and		
boulders -----	23	204	clay streaks ----	23	474
Gravel and clay			Gravel -----	22	496
streaks -----	22	226	Clay, soft and		
Clay and fine gravel	23	249	gravel -----	22	518
Shale, hard; clay and			Clay and gravel ---	23	541
sand -----	22	271	Clay and fine gravel	22	563
Clay and fine gravel	23	294	Gravel, with clay		
Gravel, with clay			streaks -----	22	585
streaks -----	22	316	Boulders; gravel		
			and clay streaks	25	610

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/13W-20B3. Altitude about 2,426 ft. Drilled by Evans Bros.
14-inch casing to 682 ft; perforated 360-680 ft.

Soil; sand and clay -	200	200	Sand and clay		
Sand, coarse, with			streaks -----	65	460
small gravel and			Clay and sand -----	50	510
streaks of clay	33	233	Sand, hard and		
Clay -----	67	300	streaks of clay -	20	530
Sand and clay streaks	60	360	Clay; thin streaks		
Clay, with thin			of sand and		
streaks of sand ---	35	395	streaks of hard		
			sand -----	146	676
			Rock, hard -----	4	680

8N/13W-21B1. Altitude about 2,410 ft. 12-inch casing; perforated
100-400 ft.

Sand and gravel -----	100	100	Clay -----	25	250
Clay and gravel -----	30	130	Clay and gravel ---	50	300
Sand and gravel -----	30	160	Gravel -----	30	330
Sand -----	15	175	Clay and boulders -	45	375
Gravel -----	25	200	Clay -----	25	400
Clay and gravel -----	25	225			

8N/13W-21E1. Altitude about 2,418 ft. Drilled by F. Rottman.
12-inch casing.

Soil, surface -----	46	46	Sand, hard and		
Clay and sand -----	22	68	some clay -----	45	296
Clay; sand and			Sand and clay -----	44	340
boulders -----	70	138	Sand, hard and clay	45	385
Clay and gravel -----	23	161	Sand and gravel ---	45	430
Gravel -----	44	205	Sand, hard -----	70	500
Gravel, with streaks					
of clay -----	46	251			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/13W-21J1. Altitude about 2,400 ft. Drilled by F. Rottman.
16-inch casing to 600 ft; perforated 275-600 ft.

Topsoil -----	5	5	Clay, sandy, with		
Sand, with clay			gravel streaks -	42	352
streaks -----	27	32	Clay, sandy and		
Sand; gravel and			rocks -----	5	357
rocks -----	35	67	Sand; gravel and		
Sand, coarse and			rocks -----	48	405
rocks -----	18	85	Clay -----	7	412
Sand, with clay			Sand and gravel --	25	437
streaks -----	15	100	Clay, sandy and		
Clay, sandy and rocks	65	165	rocks -----	16	453
Sand; gravel and clay			Sand and gravel --	21	474
streaks -----	25	190	Sand, with clay		
Sand and gravel -----	27	217	streaks -----	18	492
Clay, sandy and rocks	8	225	Sand, coarse -----	35	527
Gravel, sandy and			Sand; gravel and		
rocks -----	20	245	rocks -----	91	618
Sand, coarse -----	23	268			
Clay, sandy, with					
gravel streaks -----	22	290			
Clay and rocks -----	20	310			

8N/13W-22K2. Altitude about 2,385 ft. Drilled by Evans Bros.
14-inch casing to 573.8 ft; perforated 319.5-573.8 ft.

Sand -----	15	15	Sand, with streaks		
Sand and gravel, with			of brown clay		
streaks of brown			and cobblestones	15	332
clay -----	75	90	Clay and sand -----	69	401
Sand, with streaks of			Sand and streaks		
sandy brown clay --	84	174	of sandy brown		
Clay, brown, sandy --	62	236	clay -----	106	507
Sand, coarse, with			Boulders and sand	3	510
streaks of brown			Sand and streaks		
clay -----	27	263	of clay -----	47	557
Clay, brown and			Boulders -----	5	562
streaks of sand ---	54	317	Boulders and brown		
			clay -----	11	573

Thickness Depth		Thickness Depth	
(feet)	(feet)	(feet)	(feet)

8N/13W-23E1. Altitude about 2,382 ft. 14-inch casing to 529 ft.

Sand; gravel and clay -----	60	60	Lime -----	94	806
Sand; gravel; clay and shale -----	185	245	Conglomerate -----	13	819
Shale, hard, sandy and boulders -----	15	260	Shell -----	1	820
Gravel -----	25	285	Conglomerate -----	161	981
Shale, hard, sandy and boulders -----	30	315	Rock -----	2	983
Shale, blue -----	10	325	Conglomerate -----	449	1,432
Gravel, packed -----	24	349	Stone, very hard -	3	1,435
Gravel; clay and boulders -----	8	357	Conglomerate -----	100	1,535
Conglomerate -----	165	522	Clay, red -----	10	1,545
Sand and shale -----	19	541	Shale; sand, brown	17	1,562
Conglomerate -----	3	544	Conglomerate -----	148	1,710
Sand; lime and shale	19	563	Sandstone -----	9	1,719
Conglomerate -----	19	582	Conglomerate -----	134	1,853
Sand; gravel and lime -----	19	601	Boulders -----	1	1,854
Conglomerate -----	111	712	Conglomerate -----	95	1,949
			Shell -----	5	1,954
			Conglomerate -----	82	2,036
			Shell -----	5	2,041
			Conglomerate -----	22	2,063

8N/13W-23M3. Altitude about 2,377 ft. Drilled by Evans Bros. 14-inch casing to 472 ft; perforated 286-472 ft.

Sand and gravel -----	19	19	Clay, sandy, brown	75	293
Sand, with streaks of clay -----	24	43	Sand, coarse, with streaks of brown clay -----	45	338
Sand, coarse -----	22	65	Sand, medium to fine -----	29	367
Gravel and brown clay	5	70	Sand, coarse, with streaks of brown clay -----	30	397
Sand, hard and gravel	16	86	Gravel and brown clay -----	12	409
Clay, with streaks of gravel -----	67	153	Gravel and sand --	24	433
Clay, brown -----	14	167	Rock -----	56	489
Clay, brown with streaks of sand and gravel -----	6	173			
Clay, sandy -----	45	218			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/13W-28R1. Altitude about 2,373 ft. Drilled by Pengilley Drilling Co. 6-inch casing to 201 ft; perforated 140-201 ft.

Clay, brown -----	12	12	Clay, brown -----	22	144
Gravel -----	10	22	Sand -----	5	149
Clay -----	11	33	Clay, soft -----	7	156
Sand -----	9	42	Sand, coarse -----	4	160
Clay, brown -----	12	54	Clay, hard -----	11	171
Clay and sand -----	6	60	Sand and gravel ---	12	183
Gravel and clay ----	32	92	Clay, hard -----	5	188
Clay, white, hard --	23	115	Clay and sand -----	13	201
Sand and gravel ----	7	122			

8N/13W-29B1. Altitude about 2,412 ft. Drilled by Rottman Drilling Co. 12-inch casing to 500 ft; perforated 210-500 ft.

Sand, surface -----	40	40	Sand, hard-packed -	2	289
Sand and gravel ----	20	60	Sand, hard-packed		
Sand, with some clay	7	67	and boulders ----	31	320
Sand and large gravel	23	90	Rock, red -----	5	325
Gravel and sand----	37	127	Boulders and sand -	8	333
Gravel, with streaks			Rock, red -----	7	340
of clay -----	8	135	Rock, with some		
Gravel and sand ----	21	156	sand -----	20	360
Sand, fine -----	15	171	Sand and gravel ---	16	376
Sand and gravel ----	19	190	Sand and clay -----	7	383
Sand, clay and			Clay and some gravel	17	400
boulders -----	22	212	Clay and boulders -	10	410
Sand and gravel ----	20	232	Clay and gravel ---	23	433
Boulders -----	7	239	Sand and gravel ---	14	447
Sand and boulders,			Sand and gravel,		
with streaks of			with streaks of		
clay -----	14	253	clay -----	8	455
Boulders and sand --	12	265	Sand and gravel ---	23	478
Sand, fine and			Sand and gravel,		
boulders -----	22	287	with streaks of		
			clay -----	22	500

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/13W-29M1. Altitude about 2,418 ft. Drilled by Rottman Drilling Co.
12-inch casing to 500 ft; perforated 210-500 ft.

Soil, surface -----	40	40	Sand, fine and		
Sand and gravel ----	20	60	boulders -----	31	287
Sand and clay -----	7	67	Sand, hard-packed	11	298
Sand and coarse			Sand and boulders	22	320
gravel -----	23	90	Rock, red -----	5	325
Gravel and sand ----	23	113	Boulders and sand	8	333
Gravel -----	14	127	Rock, red -----	7	340
Gravel, coarse ----	8	135	Rock and some sand	20	360
Gravel, streaks of			Sand, gravel and		
clay -----	21	156	clay -----	23	383
Sand, fine -----	15	171	Clay and gravel --	17	400
Gravel and sand ----	19	190	Gravel, boulders		
Sand, clay and			and clay -----	33	433
boulders -----	22	212	Sand and gravel --	14	447
Sand and gravel ----	20	232	Sand and boulders	8	455
Boulders -----	7	239	Sand and gravel,		
Sand, boulders, clay	14	253	with some clay -	32	487
Boulders and sand --	3	256	Sand and clay ----	7	494
			Clay -----	6	500

8N/13W-30A1. Altitude about 2,436 ft. Drilled by Rottman Drilling Co.
14-inch casing to 250 ft and 12-inch to 607 ft; perforated 176-607 ft.

Sand, surface -----	60	60	Clay -----	42	396
Clay, with gravel --	60	120	Sand -----	6	402
Gravel -----	20	140	Clay and rock ----	28	430
Clay and boulders --	30	170	Gravel, sand, and		
Clay and gravel ----	20	190	clay streaks ---	66	496
Clay and boulders --	60	250	Sand -----	44	540
Gravel, coarse ----	10	260	Clay, soft -----	20	560
Clay -----	80	340	Sand -----	43	603
Gravel -----	14	354	Rock -----	4	607

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/13W-31D1. Altitude about 2,435 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 826 ft; perforated 368-826 ft.

Sand -----	10	10	Clay and sand ----	30	390
Hardpan -----	5	15	Sand -----	30	420
Sand, with thin streaks of clay --	45	60	Sand, coarse, with thin streaks of		
Sand -----	55	115	brown clay -----	247	667
Sand, with thin streaks of clay --	145	260	Sand, firm-packed	43	710
Sand, coarse, with streaks of clay --	50	310	Sand, with streaks of clay -----	16	726
Sand and clay -----	50	360	Sand, coarse -----	100	826

8N/13W-31N1. Altitude about 2,450 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 785 ft; perforated 370-785 ft.

Soil, surface -----	20	20	Sand, with streaks of clay -----	54	300
Gravel -----	18	38	Clay -----	30	330
Clay -----	19	57	Sand -----	28	358
Clay and sand -----	18	75	Sand, with streaks of clay -----	22	380
Sand, fine and clay	22	97	Sand -----	88	468
Gravel -----	22	119	Gravel and shale -	23	491
Clay and gravel ----	16	135	Gravel and sand	23	514
Clay -----	21	156	Gravel, with streaks of clay	89	603
Clay, with streaks of gravel -----	23	179	Gravel -----	27	630
Gravel -----	22	201	Gravel, with streaks of clay	87	717
Sand, with streaks of shale -----	22	223	Sand and gravel --	66	783
Shale and sand -----	23	246	Rock -----	2	785

8N/13W-31R1. Altitude about 2,434 ft. Drilled by Rottman Drilling Co. 14-inch casing to 200 ft and 10-inch to 452 ft; perforated 200-452 ft.

No record -----	200	200	Sand and boulders -	7	235
Clay -----	10	210	Clay, tough -----	19	254
Sand -----	2	212	Sand -----	2	256
Clay -----	16	228	Clay -----	16	272

8N/13W-31R1.--Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay, tough -----	18	290	Clay -----	8	390
Clay -----	12	302	Boulders -----	2	392
Clay and rocks -----	25	327	Clay -----	26	418
Clay, tough -----	23	350	Sand and gravel --	6	424
Clay -----	15	365	Clay -----	11	435
Clay, tough and rocks	7	372	Rock and clay ----	5	440
Clay -----	8	380	Sand -----	2	442
Gravel, 2-inch diameter -----	2	382	Clay -----	10	452

8N/13W-32G1. Altitude about 2,405 ft. Drilled by R. H. Orr.
14-inch casing to 136 and 10-inch to 451 ft.

Soil -----	42	42	Cement and clay --	22	290
Sand -----	2	44	Sand -----	3	293
Clay -----	20	64	Cement and clay --	9	302
Sand -----	3	67	Sand -----	3	305
Clay -----	17	84	Clay -----	10	315
Sand -----	1	85	Sand -----	4	319
Clay and cement ----	23	108	Cement and clay --	21	340
Sand -----	2	110	Sand -----	4	344
Clay -----	15	125	Cement and clay --	16	360
Sand -----	2	127	Sand -----	2	362
Clay -----	23	150	Clay -----	8	370
Sand -----	4	154	Sand -----	3	373
Cement -----	26	180	Cement and clay --	7	380
Sand -----	3	183	Sand -----	4	384
Cement -----	20	203	Cement and clay --	18	402
Sand -----	2	205	Sand -----	3	405
Clay -----	18	223	Clay -----	20	425
Sand -----	2	225	Sand -----	9	434
Clay -----	40	265	Cement and clay --	17	451
Sand -----	3	268			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/13W-32N1. Altitude about 2,426 ft. Drilled by Rottman Drilling Co. 16-inch casing to 570 ft; perforated 180-570 ft.

Sand -----	24	24	Sand and clay ----	20	360
Sand, hard -----	36	60	Rock -----	20	380
Clay and hard sand -	80	140	Sand, tough and		
Sand, hard -----	30	170	clay -----	20	400
Gravel -----	10	180	No record -----	20	420
Clay and sand -----	60	240	Clay, tough -----	40	460
Sand, hard -----	45	285	Clay, solid -----	40	500
Rock -----	35	320	Rock -----	20	520
Clay, tough -----	20	340	Clay and gravel --	30	550
			Rock and clay ----	20	570

8N/13W-33G1. Altitude about 2,385 ft. Drilled by R. H. Orr. 14-inch casing to 101 ft and 10-inch to 401 ft; perforated 91-401 ft.

Soil -----	25	25	Sand -----	2	247
Sand -----	2	27	Clay -----	23	270
Clay -----	33	60	Sand -----	2	272
Sand -----	2	62	Clay -----	23	295
Clay -----	6	68	Sand -----	3	298
Sand -----	20	88	Clay -----	12	310
Clay -----	22	110	Sand -----	2	312
Sand -----	2	112	Clay -----	33	345
Clay -----	18	130	Sand -----	4	349
Sand -----	3	133	Clay -----	6	355
Clay -----	21	154	Sand -----	1	356
Sand -----	2	156	Cement and clay --	19	375
Clay -----	24	180	Sand -----	2	377
Sand -----	2	182	Cement and clay --	3	380
Clay -----	18	200	Sand -----	2	382
Sand -----	3	203	Clay -----	19	401
Cement and clay ----	30	233			
Sand -----	2	235			
Cement and clay ----	10	245			

Thickness Depth			Thickness Depth		
(feet) (feet)			(feet) (feet)		
8N/13W-33L1. Altitude about 2,390 ft. Drilled by Evans Bros. 12-inch casing to 450 ft; perforated 300-450 ft.					
Sand -----	30	30	Sand, with streaks of clay -----	69	290
Sand, with streaks of sandy clay ----	30	60	Sand, coarse, with streaks of clay	30	320
Sand, sandy clay, with thin streaks of black clay ----	38	98	Clay, with streaks of coarse sand -	40	360
Sand, fine to coarse, with thin streaks of brown clay ----	37	135	Sand, with streaks of clay -----	30	390
Sand, coarse, with streaks of brown clay -----	55	190	Clay, with streaks of sand and small gravel ---	60	450
Clay, sandy and tough	31	221			
8N/14W-1H1. Altitude about 2,465 ft. Drilled by Evans Bros. 14-inch casing to 400 ft; open hole to 482 ft.					
Soil, surface and clay -----	70	70	Clay, tough and sticky -----	80	250
Clay and gravel ----	10	80	Sand and gravel, with streaks of clay -----	225	475
Sand, hard -----	12	92	Boulders -----	4	479
Sand; gravel and streaks of clay --	78	170	Rock -----	3	482
8N/14W-1K2. Altitude about 2,474 ft. Drilled by Evans Bros. 12-inch casing to 602 ft; perforated 302-602 ft.					
Clay, brown and sand	18	18	Sand, firm -----	57	302
Sand, coarse and streaks of clay --	28	46	Clay, with streaks of sand and hard gravel -----	62	364
Sand, firm -----	111	157	Clay, brown; rocks	86	450
Clay, with streaks of gravel -----	20	177	Sand and fine gravel, with streaks of brown clay -----	60	510
Sand, sharp; gravel, with streaks of clay -----	28	205	Clay, brown; and hard sand -----	92	602
Clay, with streaks of sand -----	10	215			
Sand, with streaks of clay -----	30	245			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/14W-8B1. Altitude about 2,565 ft. Drilled by F. Rottman.
16-inch casing to 1,036 ft; perforated 437-1,036 ft.

Soil, surface -----	20	20	Sand; gravel;		
Clay and sand -----	40	60	streaks of clay	129	619
Clay, sandy -----	5	65	Sand and rocks ---	31	650
Sand; gravel; rocks	69	134	Sand; gravel; rocks	22	672
Clay, sandy -----	9	143	Sand, firm, with		
Clay -----	17	160	streaks of clay	76	748
Clay and rocks -----	6	166	Sand, streaks of		
Sand; gravel; rocks	6	172	clay; rocks -----	17	765
Sand, firm; gravel -	33	205	Sand, hard clay;		
Sand -----	14	219	rocks -----	32	797
Sand, with streaks			Sand, firm -----	38	835
of clay -----	38	257	Sand, streaks of		
Gravel; sand; streaks			clay; rocks ----	20	855
of clay -----	30	287	Sand, coarse, with		
Rocks; gravel;			firm streaks ---	93	948
streaks of clay --	120	407	Sand, with some		
Gravel; sand; clay -	83	490	clay -----	67	1,015
			Sand, firm, clay		
			streaks -----	17	1,032
			Clay, sandy; gravel	68	1,100

8N/14W-12D2. Altitude about 2,486 ft. Drilled by Evans Bros.
14-inch casing to 704 ft; perforated 303-704 ft.

Clay, black -----	15	15	Sand and clay, with		
Sand and clay -----	135	150	some small		
Sand, with streaks			boulders -----	20	460
of clay -----	140	290	Sand, with streaks		
Clay -----	36	326	of clay -----	47	507
Sand, with streaks			Sand -----	100	607
of clay -----	54	380	Sand, with thin		
Clay -----	60	440	streaks of clay -	97	704

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/14W-13G1. Altitude about 2,474 ft. Drilled by F. Rottman.
14-inch casing to 485 ft; perforated 200-485 ft.

Soil, surface -----	70	70	Clay and boulders	25	285
Sand and gravel ----	40	110	Sand and gravel --	20	305
Gravel and clay ----	30	140	Clay and sand ----	25	330
Gravel -----	35	175	Gravel -----	40	370
Clay -----	45	220	Clay and boulders	30	400
Clay and boulders --	15	235	Rock -----	35	435
Clay and gravel ----	25	260	Clay, hard and sandy -----	50	485

8N/14W-13H1. Altitude about 2,467 ft. Drilled by Evans Bros.
14-inch casing to 527 ft; perforated 285-345 and 352-527 ft.

Clay and hardpan ---	35	35	Clay, gray; small gravel -----	23	438
Sand -----	60	95	Clay, brown; coarse sand -----	14	452
Sand and brown clay	135	230	Sand; clay; boulders	23	475
Sand, coarse; brown clay -----	45	275	Sand and clay, with some cobblestones	45	520
Sand, coarse; small gravel and brown clay -----	20	295	Clay, brown -----	6	526
Sand, coarse -----	115	410	Rock -----	2	528
Boulders -----	5	415			

8N/14W-14F1. Altitude about 2,505 ft. Drilled by F. Rottman.
14-inch casing to 402 ft; perforated 300-402 ft.

Soil, surface -----	20	20	Sand, fine -----	20	270
Sand and clay -----	20	40	Sand, coarse -----	20	290
Gravel, coarse; clay	40	80	Gravel, coarse; sand -----	20	310
Gravel, coarse; sand	20	100	Sand, coarse -----	22	332
Sand, fine; streaks of clay -----	20	120	Sand, hard-packed -	22	354
Gravel, coarse -----	20	140	Sand and gravel ---	36	390
Sand; gravel; streaks of clay --	50	190	Sandstone -----	12	402
Sand, fine; clay ---	20	210			
Sand, fine; gravel -	40	250			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/14W-14J1. Altitude about 2,488 ft. Drilled by F. Rottman.
14-inch casing to 450 ft; perforated 320-450 ft.

Soil, surface -----	50	50	Gravel -----	8	257
Clay -----	35	85	Clay -----	21	278
Gravel -----	22	107	Clay and fine sand	23	301
Clay and gravel ----	19	126	Gravel -----	23	324
Gravel, fine -----	17	143	Clay -----	21	345
Clay -----	24	167	Sand, fine; gravel	22	367
Gravel -----	13	180	Gravel -----	10	377
Clay and fine sand -	22	202	Sand, fine: clay -	53	430
Clay -----	23	225	Clay -----	20	450
Shale, hard -----	24	249			

8N/14W-14N1. Altitude about 2,511 ft. 8-inch casing to 146 ft
and 6½-inch to 252 ft.

Soil -----	90	90	Sand and rock ----	15	150
Sand -----	2	92	Sand -----	2	152
Clay -----	18	110	Clay -----	8	160
Sand -----	3	113	Sand -----	5	165
Clay -----	19	132	Tuff -----	87	252
Sand -----	3	135			

8N/14W-15B1. Altitude about 2,520 ft. Drilled by Evans Bros.
14-inch casing to 320 ft; perforated 196-320 ft.

Soil, surface; coarse sand -----	160	160	Sand, hard -----	12	260
Sand, coarse, with streaks of clay --	40	200	Sand, with streaks of clay -----	60	320
Sand, with streaks of clay -----	48	248	Limestone, hard and white -----	98	418

Thickness Depth		Thickness Depth	
(feet)	(feet)	(feet)	(feet)

8N/14W-15G1. Altitude about 2,525 ft. Drilled by Evans Bros.
14-inch casing to 469 ft; perforated from 228-469 ft.

Soil, surface -----	30	30	Sand and gravel --	26	220
Sand and gravel ----	28	58	Clay and boulders	35	255
Sand, with streaks			Sand, hard -----	45	300
of clay -----	42	100	Sand and boulders	30	330
Clay, sandy -----	32	132	Sand -----	36	366
Clay, with streaks			Clay and boulders	90	456
of gravel -----	32	164	Boulders -----	6	462
Sand, hard -----	5	169	Rock -----	7	469
Sand -----	17	186			
Boulders -----	8	194			

8N/14W-15G2. Altitude about 2,521 ft. Drilled by Evans Bros.
14-inch casing to 421 ft; perforated 234-421 ft.

Sand -----	133	133	Clay, with streaks		
Sand, with streaks			of sand -----	90	420
of clay -----	97	230	Limestone, hard and		
Sand -----	100	330	white -----	1	421

8N/14W-17M1. Altitude about 3,592 ft. Drilled by Evans Bros.
14-inch casing to 670 ft; open hole to 828 ft; perforated 270-670 ft.

Soil, surface -----	8	8	Boulders -----	3	457
Sand, with thin			Clay, with streaks		
streaks of clay --	47	55	of sand -----	33	490
Sand, coarse, with			Sand and gravel,		
streaks of clay --	43	98	with streaks of		
Clay, with streaks			clay -----	15	505
of sand -----	25	123	Gravel, sandy ----	25	530
Gravel, coarse; clay			Clay and boulders	10	540
and sand -----	75	198	Clay, with streaks		
Clay, with streaks			of sand -----	10	550
of sand -----	22	220	Clay, blue; sand -	50	600
Clay -----	30	250	Sand; clay; boulders	45	645
Sand; gravel; clay -	20	270	Clay, blue; boulders	5	650
Clay and gravel ----	30	300	Clay and sandstone	20	670
Clay -----	20	320	Sand and clay ----	10	680
Clay, sandy -----	60	380	Clay, with thin		
Sand; clay; gravel			streaks of sand	80	760
streaks -----	74	454	Sand -----	30	790
			Shale, blue; some		
			hard gravel ----	38	828

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/14W-18N1. Altitude about 2,642 ft. Drilled by F. Rottman.
16-inch casing to 450 ft and 14-inch to 865 ft; perforated 250-865 ft.

Soil, surface -----	50	50	Clay and boulders -	20	400
Sand and clay -----	20	70	Boulders and coarse		
Boulders -----	20	90	gravel -----	25	425
Sand, hard-packed ---	20	110	Boulders and clay -	35	460
Clay, hard -----	15	125	Clay, hard; sand --	35	495
Boulders and coarse			Sand, hard;		
sand -----	15	140	boulders -----	25	520
Clay, hard; gravel --	20	160	Clay, hard -----	25	545
Boulders, small -----	10	170	Sand, hard; clay --	25	570
Sand, coarse -----	30	200	Boulders and coarse		
Sand, coarse, with			gravel -----	15	585
some clay -----	10	210	Gravel -----	20	605
Boulders -----	10	220	Clay, hard; boulders	20	625
Clay, with some			Gravel and clay ---	35	660
coarse gravel -----	15	235	Sand, hard-packed;		
Boulders and clay ---	20	255	clay -----	35	695
Clay -----	10	265	Boulders and hard-		
Clay and boulders ---	35	300	packed clay -----	10	705
Boulders and coarse			Sand, coarse; clay	35	740
sand -----	20	320	Gravel, coarse; clay	40	780
Sand, coarse; clay --	15	335	Gravel -----	20	800
Boulders and coarse			Gravel, with some		
sand -----	20	355	clay -----	25	825
Boulders and gravel -	25	380	Gravel, coarse ----	25	850
			Clay -----	15	865

8N/14W-23G2. Altitude about 2,498 ft. Drilled by Evans Bros.
14-inch casing to 396 ft; perforated 289-396 ft.

Sand and clay -----	62	62	Sand and clay -----	11	247
Clay and fine sand --	25	87	Sand, with cobble-		
Sand and clay -----	23	110	stones and		
Clay and sand -----	12	122	streaks of clay -	97	344
Sand and clay -----	68	190	Sand and clay -----	50	394
Clay and sand -----	46	236	Rock, white -----	2	396

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/14W-24E1. Altitude about 2,480 ft. Drilled by Evans Bros.
14-inch casing to 436 ft; perforated 250-436 ft.

Sand -----	18	18	Gravel, hard, with		
Clay -----	7	25	streaks of sandy		
Sand -----	5	30	clay -----	65	235
Clay and sand -----	10	40	Gravel and small		
Sand, with thin			boulders -----	10	245
streaks of clay --	26	66	Sand, with streaks		
Sand -----	29	95	of clay and hard		
Sand, with thin			sand -----	45	290
streaks of clay --	15	110	Sand and fine		
Sand -----	50	160	gravel -----	120	410
Clay, sandy -----	5	165	Clay, with streaks		
Sand and gravel ----	5	170	of sand and		
			gravel -----	24	434
			Rock, hard and		
			white -----	2	436

8N/14W-24M1. Altitude about 2,485 ft. Drilled by Evans Bros.
14-inch casing to 333 ft; perforated 209-333 ft.

Sand, Surface -----	20	20	Sand -----	106	329
Clay, with streaks			Rock -----	4	333
of sand and gravel	55	75			
Sand, with streaks					
of sandy clay ----	148	223			

8N/14W-25A1. Altitude about 2,455 ft. Drilled by Evans Bros.
14-inch casing to 496 ft; perforated 300-496 ft.

Sand and hardpan ---	15	15	Sand, hard and		
Sand and gravel ----	66	81	sharp -----	13	268
Clay -----	14	95	Sand, hard, with		
Sand, with streaks			streaks of clay	22	290
of clay -----	25	120	Clay, with streaks		
Sand, with thin			of hard sand and		
streaks of clay --	20	140	gravel -----	10	300
Clay -----	40	180	Sand and gravel,		
Sand, hard -----	10	190	with streaks of		
Clay, with thin			clay -----	30	330
streaks of hard					
sand -----	65	255			

8N/14W-25A1.--Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Gravel, coarse and colored, with sharp and rounded sand grains -----	2	332	Gravel and sand, with thin streaks of clay -----	115	485
Clay, with streaks of fine gravel ---	6	338	Clay -----	3	488
Clay -----	17	355	Sand, with thin streaks of clay -	4	492
Clay, with streaks of sand and fine gravel -----	15	370	Rock, hard -----	4	496

8N/14W-30H1. Altitude about 2,675 ft. Drilled by F. Rottman.
6-inch casing to 179 ft; perforated 39-179 ft.

Topsoil, sandy -----	20	20	Shale and volcanic rock -----	5	95
Sand, coarse; clay; boulders -----	23	43	Shale, blue and granite boulders	20	115
Tuff and streaks of coarse sand -----	32	75	Granite, blue -----	40	155
Shale, blue -----	15	90	Granite, decomposed and volcanic rock	24	179

8N/15W-2H1. Altitude about 2,625 ft. Drilled by Evans Bros.
14-inch casing to 625 ft; perforated 320-625 ft.

Clay, brown -----	10	10	Sand -----	19	420
Sand, coarse; streaks of clay; fine gravel	37	47	Boulders -----	3	423
Clay, sandy -----	18	65	Sand; clay; boulders	37	460
Sand, hard, with streaks of sandy clay -----	59	124	Sand and boulders, with thin streaks of clay -----	30	490
Sand, with streaks of brown sandy clay	156	280	Clay, brown; streaks of sand; some boulders -----	89	579
Sand, brown, with streaks of sand ---	33	313	Sand, coarse, with some boulders ---	35	614
Sand, coarse, with streaks of brown clay -----	78	391	Clay, brown; fine sand -----	11	625
Sand, fine -----	10	401			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/15W-2Q1. Altitude about 2,645 ft. Drilled by Evans Bros.
14-inch casing to 500 ft.

Sand, surface -----	44	44	Clay, with streaks		
Sand, coarse -----	46	90	of sand and		
Sand, with thin			gravel -----	30	410
streaks of clay --	80	170	Sand and gravel ---	8	418
Sand, hard -----	17	187	Boulders -----	11	429
Sand, fine -----	13	200	Sand -----	6	435
Sand, hard -----	25	225	Sand, hard, with		
Sand and clay -----	10	235	streaks of clay -	7	442
Sand, fine -----	45	280	Sand, with streaks		
Clay, sandy -----	50	330	of clay -----	8	450
Gravel, with streaks			Sand, hard -----	8	458
of clay -----	10	340	Clay, sandy, with		
Clay, sandy, with			streaks of sand -	42	500
streaks of sand --	40	380			

8N/15W-7N1. Altitude about 2,763 ft. Drilled by F. Rottman.
14-inch casing to 589 ft; perforated 220-589 ft.

Soil -----	65	65	Clay, sandy -----	19	500
Clay and coarse			Gravel, fine -----	15	515
gravel -----	115	180	Sand, hard; clay --	25	540
Clay, soft; gravel --	27	207	Clay, hard -----	20	560
Gravel, fine; clay --	50	257	Clay, fine and		
Sand, hard-packed ---	34	291	sandy -----	10	570
Clay, soft; fine sand	19	310	Gravel and clay ---	10	580
Sand, gravel and clay			Sand, fine, hard-		
streaks -----	45	355	packed -----	10	590
Sand, hard and fine -	75	430	Clay and gravel ---	20	610
Sand, fine and			Sand, firm -----	38	648
streaks of clay ---	11	441	Sand, with hard		
Sand, fine -----	34	475	streaks -----	5	653
Clay, hard -----	6	481			

Thickness Depth		Thickness Depth	
(feet)	(feet)	(feet)	(feet)

8N/15W-22A1. Altitude about 2,744 ft. Drilled by owner.
9-inch casing; perforated 116-202 ft.

Topsoil -----	6	6	Clay, soft, and hard		
Sand -----	2	8	layers of sand --	39	139
Sand and clay -----	10	18	Gravel; rocks; sand	4	143
Sand, fine and loose	7	25	Clay and sand -----	3	146
Sand, with small			Sand; gravel; rock	2	148
amount of clay ---	5	30	Clay and sand -----	3	151
Sand and clay -----	5	35	Gravel -----	5	156
Sandstone, hard ----	7	42	Sand and clay -----	3	159
Sandstone, hard,			Gravel and sand ---	4	163
with layers of			Clay, hard, and sand	14	177
gravel and clay --	8	50	Sand and clay -----	11	188
Clay and gravel -----	3	53	Sand, fine, and		
Clay; gravel;			gravel -----	5	193
sandstone -----	19	72	Clay and rock -----	3	196
Sand, loose, and			Gravel -----	3	199
gravel -----	10	82	Gravel and fine		
Rock and gravel -----	1	83	sand -----	9	208
Sand and soft clay --	5	88			
Clay, soft -----	6	94			
Sand, loose, and clay	6	100			

8N/15W-22A2. Altitude about 2,745 ft. Drilled by Evans Bros.
12-inch casing to 425 ft; perforated 200-425 ft.

Soil, surface -----	10	10	Gravel, small -----	5	160
Gravel, small -----	5	15	Clay, with streaks		
Sand, fine -----	5	20	of gravel -----	25	185
Sand and gravel -----	10	30	Gravel -----	10	195
Sand, hard -----	20	50	Sand -----	35	230
Sand and gravel -----	40	90	Sand, coarse, with		
Sand, with streaks			streaks of clay -	70	300
of clay -----	10	100	Sand and gravel ---	120	420
Gravel, with streaks			Clay -----	5	425
of clay -----	55	155			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/15W-29M1. Altitude about 3,017 ft. 6-inch casing.

No record -----	10	10	Sand and gravel---	2	112
Sand and gravel ----	2	12	No record -----	1	113
No record -----	8	20	Sand and silt ----	1	114
Sand and gravel ----	4	24	No record -----	5	119
No record -----	12	36	Sand and gravel --	1	120
Sand, fine; silt ---	1	37	No record -----	6	126
No record -----	9	46	Sand; gravel; clay	1	127
Sand, fine; gravel -	1	47	No record -----	6	133
No record -----	18	65	Sand and gravel --	1	134
Sand, coarse; gravel	2	67	No record -----	7	141
No record -----	5	72	Silt and gravel --	1	142
Sand and silt -----	1	73	No record -----	1	143
No record -----	6	79	Silt; sand; gravel	1	144
Clay and sand -----	1	80	No record -----	3	147
No record -----	2	82	Clay and gravel --	1	148
Silt and coarse			No record -----	3	151
gravel -----	3	85	Clay and gravel --	10	161
No record -----	9	94	No record -----	10	171
Clay and sand -----	1	95	Sand and gravel --	2	173
No record -----	6	101	No record -----	13	186
Sand and silt -----	3	104			
No record -----	6	110			

8N/15W-32L2. Altitude about 3,082 ft. Drilled by F. Rottman.
6-inch casing.

No record -----	18	18	Sand, hard; rock -	25	130
Sand and gravel ----	4	22	Clay and rock ----	30	160
Sand, hard -----	18	40	Sand and gravel --	5	165
Clay -----	40	80	Clay, soft -----	10	175
Sand -----	4	84	Clay, hard; rock -	12	187
Clay -----	16	100			
Sand -----	5	105			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/15W-33F1. Altitude about 2,946 ft. Drilled by F. Rottman.
16-inch casing to 801 ft; perforated 300-801 ft.

Soil and sand -----	20	20	Gravel -----	53	450
Gravel -----	20	40	Clay, soft -----	10	460
Gravel, fine -----	60	100	Gravel, fine -----	50	510
Sand, soft -----	30	130	Clay streaks -----	16	526
Sand, fine -----	70	200	Gravel -----	44	570
Gravel and sand ----	20	220	Clay and gravel --	20	590
Clay -----	8	228	Clay and sand ----	30	620
Clay and gravel ----	22	250	Clay, soft -----	40	660
Clay -----	20	270	Clay and gravel --	40	700
Clay and fine gravel	49	319	Clay -----	17	717
Gravel, fine -----	31	350	Clay and sand ----	43	760
Sand, sharp -----	11	361	Gravel and clay --	28	788
Sand and gravel ----	19	380	Clay -----	13	801
Clay and gravel ----	17	397			

8N/15W-34G1. Altitude about 2,860 ft. Drilled by F. Rottman.
10-inch casing; perforated 190-320 ft.

Clay and sand in alternate beds ---	200	200	Sand, coarse; gravel -----	6	300
Clay, heavy -----	8	208	No record -----	20	320
Sand and clay in alternate beds ---	86	294			

8N/16W-5M1. Altitude about 2,903 ft. Drilled by Swett Bros.
Drilling Co. 14-inch casing; perforated 348-1,001 ft.

Topsoil -----	50	50	Sand and clay ----	110	725
Clay -----	150	200	Sand, coarse -----	85	810
Gravel, coarse -----	35	235	Clay, with streaks of sand -----	80	890
Clay and sand -----	150	385	Gravel, coarse ---	45	935
Sand -----	15	400	Sand, coarse, with streaks of clay	66	1,001
Sand, coarse -----	135	535			
Sand, medium -----	80	615			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/16W-6D1. Altitude about 2,929 ft. Drilled by Swett Bros.
Drilling Co. 14-inch casing to 1,002 ft; perforated 348-1,002 ft.

Topsoil -----	50	50	Sand and clay ----	110	725
Clay -----	150	200	Sand, coarse -----	85	810
Gravel, coarse' -----	35	235	Clay, with streaks		
Clay and sand -----	150	385	of sand -----	80	890
Sand -----	15	400	Gravel, coarse ---	45	935
Sand, coarse -----	135	535	Sand, coarse, with		
Sand, medium -----	80	615	streaks of clay	67	1,002

8N/16W-6G1. Altitude about 2,915 ft. Drilled by Swett Bros.
Drilling Co. 14-inch casing to 1,007 ft; perforated 504-1,007 ft.

Topsoil -----	30	30	Sand, medium coarse	150	600
Clay -----	95	125	Sand, coarse, with		
Sand, medium coarse	155	280	streaks of clay -	119	719
Sand, coarse, with			Sand, with streaks		
streaks of clay --	70	350	of clay -----	166	885
Sand, medium coarse	61	411	Gravel, coarse ----	50	935
Sand, with streaks			Sand, coarse, with		
of clay -----	39	450	streaks of clay -	72	1,007

8N/16W-6M1. Altitude about 2,927 ft. Drilled by D. W. Slocum.
12-inch casing to 600 ft.

Soil, sandy and soft	17	17	Sand, fine -----	22	519
Gravel -----	61	79	Sand, medium -----	23	542
Clay, brown and sandy	15	93	Sand, fine -----	22	564
Gravel -----	72	165	Sand, medium -----	22	586
Clay, brown and sandy	19	184	Gravel -----	10	596
Gravel -----	22	206	Clay, brown and		
Sand, fine -----	44	250	sandy -----	13	609
Clay, brown and sandy	15	265	Sand, fine and hard	45	654
Sand, fine -----	35	300	Clay, brown and		
Gravel, sandy -----	27	327	sandy -----	23	677
Sand, fine -----	22	349	Sand, fine -----	66	743
Gravel, fine -----	21	370	Clay, brown and		
Sand, fine -----	14	384	sandy -----	45	788
Sand, coarse -----	22	406	Sand, fine, with		
Sand, fine -----	24	430	gravel -----	12	800
Sand, coarse -----	22	452	Clay -----	15	815
Sand, medium -----	22	474	Sand -----	6	821
Gravel, sandy -----	23	497	Clay, yellow -----	9	830
			Sand -----	8	838
			Clay, yellow -----	7	845

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/16W-6Q1. Altitude about 2,918 ft. Drilled by D W. Slocum.
12-inch casing to 612 ft; perforated 252-612 ft.

Soil, soft and sandy	17	17	Sand and gravel --	10	540
Gravel and sand -----	61	78	Clay, hard -----	30	570
Clay, hard and brown, with sand and gravel -----	15	93	Shale, hard and brown -----	80	650
Clay, brown -----	72	165	Sand, medium -----	20	670
Gravel, sandy -----	26	191	Shale, hard and brown -----	30	700
Sand, coarse -----	45	236	Sand, fine -----	20	720
Sand, fine -----	22	258	Shale, hard and brown -----	40	760
Sand, coarse -----	23	281	Sand and gravel --	15	775
Rock -----	23	304	Shale, hard and brown -----	19	794
Sand, fine -----	22	326	Sand, coarse -----	6	800
Clay, sandy -----	45	371	Clay, hard -----	60	860
Sand, soft and medium	66	437	Rock and sand ----	45	905
Clay and gravel -----	19	456	Clay, sandy -----	45	950
Sand, medium -----	14	470	Sand -----	23	973
Clay and gravel -----	12	482	Clay, sandy -----	21	994
Sand, coarse -----	14	496	Sand, medium -----	16	1,010
Clay and gravel -----	9	505	Clay, hard -----	10	1,020
Sand, fine -----	10	515			
Clay, yellow -----	15	530			

8N/16W-7G1. Altitude about 2,945 ft. Drilled by Swett Bros.
Drilling Co. 12-inch casing to 1,002 ft; perforated 650-1,002 ft.

Topsoil -----	30	30	Sand, coarse, with streaks of clay	230	780
Sand, fine -----	120	150	Sand and clay ----	50	830
Sand, medium coarse	50	200	Sand, coarse -----	70	900
Clay, sandy -----	85	285	Gravel, coarse ---	40	940
Sand and clay -----	80	365	Gravel and sand --	40	980
Sand, medium -----	85	450	Sand and clay ----	22	1,002
Sand, coarse -----	100	550			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/16W-7N1. Altitude about 2,997 ft. Drilled by Swett Bros.
Drilling Co. 12-inch casing to 1,004 ft; perforated 650-1,004 ft.

Topsoil -----	20	20	Sand, coarse, with		
Sand, coarse, with			streaks of clay -	187	642
streaks of clay ---	105	125	Sand -----	33	675
Clay, with streaks			Clay, sandy -----	50	725
of sand -----	50	175	Sand, coarse -----	70	795
Sand and clay -----	38	213	Sand and clay -----	21	816
Sand, coarse, and clay	137	350	Sand, coarse, with		
Sand, medium coarse -	50	400	streaks of clay -	188	1,004
Sand and clay -----	55	455			

8N/16W-8G1. Altitude about 2,910 ft. Drilled by Swett Bros.
Drilling Co. 14-inch casing; perforated 407-1,004 ft.

Topsoil -----	35	35	Sand, medium coarse,		
Sand, medium hard ---	165	200	with streaks of		
Sand, with streaks of			clay -----	85	750
clay -----	65	265	Sand, medium -----	100	850
Sand, medium coarse -	50	315	Sand, with streaks		
Sand, coarse -----	95	410	of clay -----	70	920
Sand, coarse, with			Gravel, coarse ----	65	985
streaks of clay ---	200	610	Sand, coarse, and		
Sand, coarse -----	55	665	gravel -----	15	1,000
			Sand and clay -----	4	1,004

8N/16W-8J1. Altitude about 2,943 ft. Drilled by Swett Bros.
Drilling Co. 14-inch casing to 1,002 ft; perforated 348-1,002 ft.

Topsoil -----	50	50	Sand and clay -----	110	725
Clay -----	150	200	Sand, coarse -----	85	810
Gravel, coarse -----	35	235	Clay, with streaks		
Clay and sand -----	150	385	of sand -----	80	890
Sand -----	15	400	Gravel, coarse ----	45	935
Sand, coarse -----	135	535	Sand, coarse, with		
Sand, medium -----	80	615	streaks of clay -	67	1,002

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/16W-8Q1. Altitude about 2,950 ft. Drilled by Swett Bros.
Drilling Co. 14-inch casing to 1,006 ft; perforated 407-1,006 ft.

Topsoil -----	35	35	Sand, coarse, with		
Sand, medium hard --	90	125	streaks of clay -	98	773
Sand, with streaks			Sand -----	77	850
of clay -----	75	200	Sand, with streaks		
Sand, medium coarse	129	329	of clay -----	50	900
Sand, coarse -----	96	425	Gravel, coarse ----	81	981
Sand, coarse, with			Sand, coarse and		
streaks of clay --	175	600	gravel -----	20	1,001
Sand, coarse -----	75	675	Clay and sand -----	5	1,006

8N/16W-18E1. Altitude about 3,029 ft. Drilled by Swett Bros.
Drilling Co. 12-inch casing; perforated 240-540 ft.

Sand -----	45	45	Boulders and		
Clay and gravel ----	23	68	gravel -----	67	312
Sand -----	22	90	Clay and boulders	65	377
Clay and gravel ----	23	113	Boulders -----	23	400
Boulders -----	19	132	Sand and rocks ---	22	422
Clay -----	23	155	Clay and gravel --	23	445
Boulders and clay --	22	177	Sand -----	45	490
Boulders -----	23	200	Sand and rocks ---	45	535
Clay and rock -----	45	245	No record -----	5	540

8N/16W-22Q3. Altitude about 3,049 ft. Drilled by T. R. Mollinet.
10-inch casing.

Soil; sand; gravel -	40	40	Gravel, 2-inch		
Clay and silt -----	4	44	diameter -----	8	92
Gravel, fine -----	24	68	Sand, fine; silt -	18	110
Clay -----	2	70	Clay, sticky, with		
Sand, coarse; gravel	14	84	sand and mica --	14	124

Thickness Depth		Thickness Depth	
(feet)	(feet)	(feet)	(feet)

8N/16W-22Q4. Altitude about 3,049 ft. Drilled by Mr. Bence.
8-inch casing to 152 ft.

Sand -----	84	84	Boulders -----	2	111
Boulders -----	8	92	Sand and clay ----	37	148
Clay -----	17	109	Boulders -----	4	152

8N/17W-1N1. Altitude 2,955.5 ft. Drilled by Bert Sheela.
14-inch casing to 489 ft, 12-inch casing to 603 ft, and 10-inch casing to 787 ft.

Topsoil -----	4	4	Sand -----	38	356
Clay, hard -----	12	16	Clay -----	92	448
Sand -----	22	38	Sand -----	32	480
Clay, sandy -----	42	80	Clay -----	12	492
Clay -----	23	103	Sand -----	46	538
Clay, sandy -----	73	176	Clay -----	52	590
Clay -----	36	212	Sand -----	10	600
Sand -----	20	232	Clay -----	43	643
Clay -----	8	240	Sand -----	6	649
Sand and gravel ----	7	247	Clay -----	35	684
Clay -----	7	254	Sand -----	3	687
Sand -----	22	276	Clay -----	76	763
Clay -----	42	318	Sand -----	21	784
			Clay -----	3	787

8N/17W-2N1. Altitude 2,987.5 ft. Drilled by Swett Bros. Drilling Co.

Topsoil and sand ---	27	27	Sand, fine; clay -	36	536
Sand, coarse -----	48	75	Sand and clay ----	36	572
Clay -----	45	120	Clay and medium		
Sand and clay -----	56	176	sand -----	39	611
Sand and boulders --	49	225	Sand -----	14	625
Sand; clay; boulders	25	250	Clay and sand ----	51	676
Sand and clay -----	54	304	Sand and clay ----	34	710
Sand and boulders --	16	320	Clay and sand ----	35	745
Sand and clay -----	95	415	Sand and clay ----	30	775
Clay and sand -----	63	478	Sand, coarse; clay	25	800
Sand and clay -----	22	500	Clay and sand ----	73	873
			Sand and clay ----	127	1,000

Thickness Depth		Thickness Depth	
(feet)	(feet)	(feet)	(feet)

8N/17W-2Q1. Altitude about 2,968 ft. Drilled by Swett Bros. Drilling Co.

Topsoil; sand;			Sand -----	22	480
boulders -----	35	35	Clay and sand ----	95	575
Clay and sand -----	5	40	Sand, hard -----	10	585
Sand, coarse; clay -	85	125	Clay and sand ----	40	625
Clay, with medium			Sand -----	30	655
sand -----	65	190	Clay and sand ----	95	750
Sand, coarse -----	27	217	Clay -----	11	761
Sand and clay -----	63	280	Sand and clay ----	258	1,019
Sand, fine; clay ---	55	335			
Clay and sand -----	123	458			

8N/17W-4D1. Altitude about 3,036 ft. Drilled by A. C Myers. 12-inch casing.

No record -----	40	40	No record -----	40	425
Clay, with streaks			Clay, sandy -----	13	438
of sand -----	25	65	Clay -----	12	450
Boulders -----	5	70	Sand -----	10	460
Clay, with streaks			Sand and clay ----	10	470
of sand -----	40	110	Clay, hard and		
Sand and gravel ----	50	160	silty -----	13	483
Sand, coarse; clay -	85	245	Sand -----	32	515
Clay, sandy -----	65	310	Clay, silty -----	15	530
Clay, silty; sand --	75	385			

8N/17W-11D1. Altitude about 2,993 ft. Drilled by Bert Sheela. 14-inch casing to 483 ft.

Topsoil -----	3	3	Clay, sticky -----	9	374
Clay -----	18	21	Sand -----	7	381
Sand -----	7	28	Clay, sticky -----	4	385
Clay, sandy -----	222	250	Clay and gravel --	35	420
Sand and gravel ----	72	322	Clay, sticky -----	15	435
Clay, sandy -----	10	332	Sand and gravel --	11	446
Clay -----	7	339	Clay, sticky -----	17	463
Clay, sandy -----	26	365	Sand and gravel --	21	484

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/17W-12G1. Altitude about 2,958 ft. Drilled by D. W. Slocum.
12-inch casing to 994 ft; perforated 352-994 ft.

Topsoil -----	30	30	Shale -----	25	570
Gravel, coarse -----	20	50	Gravel -----	15	585
Clay, brown and sandy -----	80	130	Shale, hard -----	27	612
Clay, hard -----	80	210	Gravel -----	23	635
Sand, coarse -----	80	290	Shale -----	25	660
Clay, brown -----	46	336	Gravel, coarse ---	47	707
Sand; fine gravel --	18	354	Sand, coarse -----	65	772
Clay, yellow -----	10	364	Clay, brown and sandy -----	46	818
Sand, coarse -----	11	375	Gravel -----	6	824
Clay, hard -----	25	400	Shale, hard and brown -----	22	846
Sand -----	10	410	Gravel -----	24	870
Clay, hard -----	12	422	Clay, brown and sandy -----	41	911
Sand, coarse -----	12	434	Clay, brown and soft -----	45	956
Clay, hard -----	23	457	Clay, brown -----	24	980
Sand, coarse -----	3	460	Sand, fine -----	12	992
Clay, hard -----	17	477	Clay, hard and brown -----	2	994
Sand, fine -----	12	489			
Clay, hard -----	12	501			
Sand, medium -----	15	516			
Shale, hard -----	14	530			
Gravel -----	15	545			

8N/17W-13H1. Altitude about 3,040 ft. Drilled by Swett Bros.
Drilling Co. 12-inch casing to 1,087 ft; perforated 354-1,087 ft.

Topsoil -----	10	10	Sand, with streaks of clay -----	120	650
Sand, medium coarse	90	100	Sand and clay ----	80	730
Sand, with streaks of clay -----	82	182	Sand and clay streaks -----	191	921
Sand, medium coarse	68	250	Sand, hard -----	59	980
Sand and clay -----	75	325	Sand, medium -----	35	1,015
Sand, medium coarse	30	355	Sand, coarse -----	65	1,080
Sand, hard, with streaks of clay --	95	450	Clay -----	7	1,087
Sand, medium -----	80	530			

Thickness Depth			Thickness Depth		
(feet) (feet)			(feet) (feet)		
8N/18W-14A1. Altitude about 3,400 ft.					
Soil, yellow -----	27	27	Sand, fine and gray	9	1,430
Sand, gray -----	24	51	Sand, gray; rocks -	34	1,464
Shale, blue -----	213	264	Sand, brown; rocks	54	1,518
Sand and rock, blue	81	345	Shale, brown and		
Shale, blue and			sandy -----	52	1,570
sandy -----	13	358	Sand, gray -----	1	1,571
Sand and rock, gray	61	419	Shale, hard and		
Shale, blue and			brown -----	219	1,790
sandy -----	161	580	Shale, hard, with		
Sand and shale -----	12	592	Granite wash ----	55	1,845
Rock, gray and hard	38	630	Sand, hard and gray	30	1,875
Shale, brown -----	16	646	Sand, gray -----	15	1,890
Shale, sandy and tan	2	648	Sand, hard and gray	145	2,035
Rock, blue and hard	90	738	Shale, sandy and		
Shale, blue and			blue -----	20	2,055
sandy -----	29	767	Sand -----	10	2,065
Shale, blue -----	14	781	Sand, hard -----	5	2,070
Shale, blue and			Sand -----	5	2,075
sandy -----	51	832	Sand, gray -----	5	2,080
Shale, brown and			Sand, hard -----	5	2,085
sandy -----	71	903	Sand, hard and gray;		
Shale, blue and			some shale -----	30	2,115
sandy -----	12	915	Shale, hard -----	2	2,117
Shale, brown and			Shale, sandy -----	3	2,120
sandy -----	6	921	Shale, sandy -----	10	2,130
Shale, blue and			Sand, gray -----	27	2,157
sandy -----	209	1,130	Shale, blue -----	3	2,160
Rock and sand, gray			Sand and boulders -	3	2,163
and hard -----	132	1,262			
Shale, brown and					
sandy -----	13	1,275			
Sand; rock; blue					
shale -----	73	1,348			
Shale, brown -----	3	1,351			
Sand and rock, gray	9	1,360			
Sand, coarse; rock,					
gray -----	3	1,363			
Sand and rock -----	58	1,421			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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8N/18W-14J1. Altitude about 3,509 ft.

Clay and gravel ----	180	180	Sandstone and shale	178	1,464
Sand and blue shale	30	210	Sandstone, medium		
Sand and silt -----	440	650	to coarse -----	12	1,476
Sandstone, hard and			Sandstone, medium		
shale -----	625	1,275	to coarse, with		
Siltstone, dark-gray			2-inch conglomerate		
and laminated,			shell -----	10	1,486
very micaceous,			Sandstone, hard;		
with abundant wood			and shale -----	524	2,010
debris -----	11	1,286	No record -----	1,744	3,754

9N/13W-20C2. Altitude 2,441.7 ft. Drilled by R and C Drilling Co.
12-inch casing; perforated 120-252 ft.

Sand -----	48	48	Sand -----	33	198
Sand, fine -----	21	69	Sand and gravel --	30	228
Sand, coarse -----	19	88	Sand, hard -----	16	244
Sand and clay -----	28	116	Sand, loose -----	6	250
Sand -----	35	151	Sandstone, hard --	6	256
Clay, sandy -----	14	165			

9N/13W-22R2. Altitude 2,375.6 ft. Drilled by Evans Bros. Drilling
Co. 6-inch casing to 251 ft.

Clay -----	19	19	Clay, with streaks		
Sand -----	25	44	of sand -----	75	195
Boulders -----	2	46	Sand and clay		
Sand, with streaks			streaks -----	56	251
of clay -----	74	120			

9N/13W-23A1. Altitude 2,404.0 ft. Drilled by F. Rottman.
14-inch casing; perforated 96-300 ft.

Clay and boulders --	60	60	Clay -----	10	120
Clay -----	20	80	Sand -----	5	125
Gravel -----	10	90	Clay and boulders	10	135
Clay and rock -----	20	110	Clay -----	10	145

9N/13W-23A1.--Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Gravel and rock	55	200	Gravel and rock --	20	260
Clay and rock --	20	220	Clay and boulders	10	270
Gravel and rock	10	230	Sand and gravel --	10	280
Clay -----	10	240	Clay -----	20	300

9N/13W-23B1. Altitude 2,399.6 ft. 12-inch casing to 80 ft,
8-inch casing to 400 ft; perforated from 70-400 ft.

Sand -----	15	15	Sand -----	2	232
Sand, hard -----	45	60	Rock and clay ----	6	238
Shale -----	33	93	Rock and gravel --	3	241
Clay, soft -----	31	124	Gravel -----	12	253
Gravel -----	5	129	Clay and rock ----	9	262
Clay -----	18	147	Sand -----	24	286
Sand -----	2	149	Clay -----	24	310
Clay -----	15	164	Sand -----	2	312
Sand -----	2	166	Clay -----	38	350
Clay -----	18	184	Gravel -----	4	354
Gravel -----	6	190	Clay -----	15	369
Clay -----	6	196	Sand -----	7	376
Clay and rocks ----	19	215	Clay -----	9	385
Sand -----	3	218	Sand -----	7	392
Clay -----	12	230	Rock and clay ----	8	400

9N/13W-23B2. Altitude about 2,398 ft. Drilled by F. Rottman.
10-inch casing; perforated 150-300 ft.

Sand, surface -----	20	20	Sand and rock ----	14	184
Sand, coarse -----	15	35	Sand and clay ----	19	203
Sand and rock -----	15	50	Boulders and rock	17	220
Sand and gravel ----	17	67	Gravel and rock --	16	236
Gravel -----	18	85	Sand and gravel --	15	251
Sand, hard -----	13	98	Sand -----	14	265
Sand, hard-packed --	22	120	Clay; sand; gravel	13	278
Sand, coarse -----	10	130	Gravel -----	17	295
Sand and gravel -----	17	147	Clay -----	5	300
Sand, hard -----	11	158			
Sand, coarse; gravel	12	170			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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9N/13W-28G2. Altitude 2,403.4 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 487 ft; perforated 302-487 ft.

Sand and clay -----	80	80	Sand; fine gravel; streaks of sandy brown clay -----	3	312
Sand; small gravel, with some silty clay -----	106	186	Clay, brown, with some well-rounded coarse gravel ---	12	324
Sand, coarse; fine gravel, with streaks of brown clay ----	84	270	Sand; sandy brown clay, with streaks of small gravel -	136	460
Sand, with streaks of brown clay and caliche -----	16	286	Sand, coarse, with streaks of brown clay -----	25	485
Sand; cobblestones and brown clay ---	17	303	Rock -----	2	487
Sand, with streaks of brown clay ----	6	309			

9N/13W-29Q1. Altitude 2,422.0 ft. Drilled by F. Rottman Drilling Co. 12-inch casing to 418 ft; perforated 100-418 ft.

Clay -----	20	20	Clay and boulders	30	220
Clay, hard -----	10	30	Clay, soft -----	20	240
Clay, soft -----	30	60	Boulders and sand	10	250
Clay and boulders --	10	70	Clay, hard -----	20	270
Clay, soft -----	30	100	Rock and sand ----	8	278
Clay, hard -----	30	130	Clay, hard -----	40	318
Clay, soft -----	10	140	Rock -----	3	321
Clay and boulders --	10	150	Sand and boulders	10	331
Clay, hard -----	10	160	Clay -----	24	355
Sand and gravel ----	8	168	Rock, red; white clay -----	63	418
Clay, soft -----	22	190			

9N/13W-31Q1. Altitude 2,441.2 ft. Drilled by R. H. Orr. 12-inch casing to 118 ft, 10-inch casing to 443 ft; perforated 107-443 ft.

Soil -----	63	63	Sand -----	2	130
Sand -----	1	64	Clay -----	20	150
Clay -----	26	90	Sand -----	3	153
Sand -----	1	91	Clay -----	7	160
Clay -----	37	128	Sand -----	2	162

9N/13W-31Q1.---Continued.

Thickness Depth (feet) (feet)			Thickness Depth (feet) (feet)		
Clay -----	18	180	Sand -----	4	324
Sand -----	2	182	Clay -----	16	340
Clay -----	27	209	Sand -----	2	342
Sand -----	2	211	Clay -----	18	360
Clay -----	14	225	Sand -----	2	362
Sand -----	2	227	Clay -----	33	395
Clay -----	20	247	Sand -----	3	398
Sand -----	3	250	Clay -----	8	406
Clay -----	10	260	Sand -----	2	408
Sand -----	1	261	Clay -----	12	420
Clay -----	12	273	Sand -----	2	422
Sand -----	3	276	Clay and cement --	21	443
Clay -----	44	320			

9N/13W-34Q1. Altitude 2,388.0 ft. Drilled by F. Rottman Drilling Co. 14-inch casing; perforated 175-600 ft.

Sand, surface -----	50	50	Boulders and clay	20	360
Gravel and sand ----	30	80	Sand and clay ----	20	380
Sand -----	30	110	Sand and gravel --	20	400
Gravel and boulders	30	140	Sand and clay ----	25	425
Gravel and sand ----	20	160	Sand, hard -----	25	450
Sand -----	40	200	Rocks and boulders	25	475
Gravel and boulders	20	220	Clay and boulders	25	500
Rock and sand -----	30	250	Clay and rocks ---	50	550
Gravel and sand ----	20	270	Boulders and rocks	25	575
Boulders and sand --	30	300	Rocks and white		
Gravel and sand ----	20	320	clay -----	25	600
Clay and sand streaks	20	340			

9N/14W-15M1. Altitude 2,594.2 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing; perforated 340-700 ft.

Sand, surface -----	25	25	Sand, coarse -----	15	200
Sand, with streaks			Clay -----	10	210
of sandy clay ----	45	70	Gravel -----	15	225
Sand, coarse -----	40	110	Sand, hard -----	15	240
Sand, with streaks			Clay, sandy -----	10	250
of gravel -----	40	150	Sand and boulders	18	268
Sand, with streaks			Clay and gravel --	10	278
of sandy clay ----	35	185	Sand, with streaks		
			of sandy clay --	35	313

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand, coarse, with streaks of clay --	45	358	Clay -----	44	534
Sand, hard -----	2	360	Sand, with streaks of clay -----	56	590
Sand, coarse, with streaks of sandy clay -----	34	394	Sand, coarse -----	9	599
Clay, sandy -----	21	415	Clay, sandy -----	22	621
Sand, hard -----	25	440	Sand and gravel --	19	640
Clay -----	15	455	Sand, hard; gravel	20	660
Gravel -----	5	460	Sand and boulders	37	697
Sand, fine -----	20	480	Rock -----	3	700
Clay and sand -----	10	490			

9N/14W-15M2. Altitude 2,589.8 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing; perforated 340-700 ft.

Soil, surface -----	18	18	Sand, hard -----	15	430
Clay -----	22	40	Sand, with some clay -----	25	455
Sand, with streaks of clay -----	45	85	Sand, fine -----	15	470
Sand -----	105	190	Sand and clay ----	10	480
Boulders -----	10	200	Sand, hard -----	15	495
Sand, hard -----	65	265	Sand and clay ----	10	505
Sand and boulders --	20	285	Clay, gray -----	5	510
Shale -----	45	330	Clay, with streaks of sand -----	105	615
Clay, with streaks of sand -----	13	343	Sand -----	20	635
Shale, with streaks of sand -----	17	360	Sand, with streaks of clay -----	45	680
Sand, hard -----	12	372	Clay, sticky -----	20	700
Sand, with streaks of clay -----	43	415			

9N/14W-15Q1. Altitude 2,559.2 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 754 ft; perforated 434-754 ft.

Sand -----	15	15	Sand, with streaks of brown clay --	106	436
Sand, with streaks of clay -----	10	25	Sand, coarse -----	51	487
Clay -----	13	38	Sand, with streaks of brown clay --	17	504
Sand and gravel, with thin streaks of clay -----	224	262	Sand, coarse, with streaks of gray clay -----	250	754
Sand, fine -----	47	309			
Rocks and sand -----	21	330			

Thickness Depth		Thickness Depth	
(feet)	(feet)	(feet)	(feet)

9N/14W-16K1. Altitude 2,624.1 ft. Drilled by F. Rottman Drilling Co. 16-inch casing.

Soil, surface -----	30	30	Sand, hard -----	45	411
Boulders -----	46	76	Clay and gravel --	21	432
Boulders and clay --	39	115	Clay and sand ----	22	454
Boulders -----	17	132	Gravel -----	22	476
Clay and fine sand -	11	143	Clay, sandy -----	24	500
Sand; clay; boulders	23	166	Clay -----	20	520
Sand, hard; clay ---	44	210	Clay and gravel --	20	540
Sand, fine; boulders	25	235	Clay, sandy; gravel	20	560
Sand, fine; gravel -	20	255	Gravel and clay --	70	630
Gravel; sand; clay -	23	278	Sand and gravel --	23	653
Clay and gravel ----	44	322	Clay and boulders	23	676
Sand, hard -----	22	344	Gravel, heavy ----	22	698
Sand, hard; boulders	22	366	Sand and clay ----	23	721

9N/14W-16M1. Altitude about 2,640 ft. Drilled by Evans Drilling Co.

Sand and clay -----	25	25	Sand, coarse; small		
Clay, brown; sand --	20	45	gravel, with		
Sand, with small			streaks of brown		
amount of clay ---	50	95	clay -----	15	110
			Sand, hard and		
			cemented -----	94	204

9N/14W-16M2. Altitude about 2,635 ft. Drilled by Evans Bros. Drilling Co.

Clay, brown; fine			Sand, medium to		
sand -----	19	19	coarse, with		
Sand, fine, with			streaks of brown		
streaks of brown			clay -- -----	8	112
clay -----	24	43	Sand, hard and fine	15	127
Sand, coarse -----	33	76	Sand, medium to		
Sand, fine and hard,			coarse, with		
with streaks of			streaks of brown		
brown clay -----	28	104	clay -----	18	145

9N/14W-16M2.--Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand and small gravel	115	260	Sand, hard and fine;		
Sand, cemented -----	26	286	brown clay -----	31	417
Sand and cobblestones			Clay, gray, with		
with streaks of			some hard sand ---	77	494
brown clay -----	81	367	Clay, soft and gray	6	500
Clay, brown; fine					
hard sand -----	19	386			

9N/14W-16M4. Altitude 2,635.0 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 705 ft; perforated 361-705 ft.

Clay, brown; fine			Clay, sandy, gray		
sand -----	27	27	and white -----	28	418
Clay, brown, with			Boulders and gray		
streaks of coarse			clay -----	7	425
sand -----	30	57	Clay, gray and white		
Sand, coarse; brown			with streaks of		
clay -----	75	132	sand and gravel -	65	490
Sand, coarse -----	117	249	Clay, brown, with		
Sand, coarse; brown			streaks of medium		
clay -----	15	264	to fine sand ----	29	519
Sand, coarse, with			Clay, hard and		
streaks of gravel			brown, with		
and brown clay ---	11	275	streaks of fine		
Sand and fine gravel			sand -----	49	568
with thin streaks			Clay, brown; fine		
of sandy clay ----	95	370	sand -----	86	654
Boulders; sand;			Clay, with streaks		
gravel -----	20	390	of sand -----	51	705

9N/14W-19P2. Altitude 2,661.5 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 782 ft; perforated 292.5-782 ft.

Sand -----	20	20	Sand, hard, gravel,		
Sand and gravel ----	43	63	with streaks of		
Sand and gravel, with			sand -----	16	361
streaks of clay --	153	216	Clay, brown; streaks		
Sand and gravel,			of sand; gravel -	49	410
cemented -----	17	233	Sand, hard, with		
Clay, sandy brown,			streaks of brown		
with streaks of			clay -----	70	480
clay -----	112	345			

9N/14W-19P2---Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay, brown, with streaks of sand --	57	537	Clay, hard; sand -	73	690
Sand, fine; brown clay -----	23	560	Clay, brown, with thin streaks of sand -----	67	757
Clay, brown; sand --	17	577	Clay, gray, with thin streaks of sand and boulders	25	782
Clay, brown, with thin streaks of sand -----	18	595			
Clay, brown; coarse sand -----	22	617			

9N/14W-23D1. Altitude 2,536.3 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 728; perforated 354-728 ft.

Clay and sand -----	28	28	Sand and brown clay	120	535
Sand and small gravel with some clay ----	47	75	Sand, cobblestones and thin streaks of clay -----	7	542
Clay, brown; sand ---	129	204	Sand and brown clay	58	600
Clay and gravel -----	19	223	Clay, brown, with streaks of sand	39	639
Clay, brown, with streaks of hard sand -----	45	268	Sand; clay; cobblestones ---	9	648
Clay, brown and sandy	22	290	Cobblestones -----	1	649
Clay, brown, with streaks of sand ---	17	307	Sand, hard, with streaks of brown clay -----	61	710
Sand, coarse and rounded -----	26	333	Sand and gray clay	8	718
Sand; sandy brown clay -----	32	365	Sand and brown clay, with streaks of gray clay -----	11	729
Cobblestones and streaks of cemented sand and clay -----	6	371			
Clay, brown, with some sand -----	44	415			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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9N/14W-25B1. Altitude 2,469.6 ft. Drilled by R and C Drilling Co.
12-inch casing; perforated 126-360 ft.

Clay, surface -----	15	15	Sand and gravel --	13	245
Sand, loose -----	11	26	Shell, hard -----	2	247
Sand, surface;gravel	116	142	Shale, hard and		
Sand, loose -----	12	154	sandy -----	13	260
Gravel -----	16	170	Shell -----	1	261
Boulders -----	2	172	Sand, loose -----	7	268
Clay -----	8	180	Boulders -----	5	273
Sand, loose -----	10	190	Clay, sandy -----	17	290
Sand and gravel ----	22	212	Sand and gravel --	49	339
Sand, loose -----	8	220	Clay, hard and		
Gravel -----	9	229	sandy -----	5	344
Boulders -----	3	232	Sand and gravel --	6	350
			Sand, loose -----	10	360

9N/14W-25B2. Altitude 2,474.2 ft. Drilled by R and C Drilling Co.
12-inch casing; perforated 125-358 ft.

Clay, sandy -----	25	25	Gravel, coarse ---	11	257
Sand and gravel ----	23	48	Clay, red -----	7	264
Boulders -----	17	65	Sand, loose -----	9	273
Sand and gravel ----	7	72	Gravel -----	11	284
Gravel -----	23	95	Shell, hard -----	2	286
Boulders -----	10	105	Clay, red -----	5	291
Gravel -----	10	115	Gravel -----	25	316
Boulders -----	1	116	Sand -----	12	328
Clay -----	14	130	Clay, red -----	2	330
Boulders -----	8	138	Gravel -----	7	337
Sand and gravel ----	72	210	Clay, hard and		
Clay -----	23	233	sandy -----	13	350
Sand, loose -----	12	245	Gravel, sandy ----	9	359
Boulders -----	1	246			

Thickness Depth		Thickness Depth	
(feet)	(feet)	(feet)	(feet)

9N/14W-25P1. Altitude about 2,470 ft. Drilled by F. Rottman Drilling Co. 12-inch casing; perforated 142-352 ft.

Sand and rocks -----	80	80	Boulders and gravel	30	230
Clay and boulders --	20	100	Rocks and gravel --	30	260
Clay and sand -----	40	140	Boulders and clay -	40	300
Boulders and rocks -	40	180	Rocks and clay ----	30	330
Boulders and clay --	20	200	Rocks and sand ----	22	352

9N/14W-27B1. Altitude 2,542.1 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 557 ft; perforated 277-557 ft.

Soil, surface -----	15	15	Clay, sandy -----	8	355
Sand and gravel ----	8	23	Sand, hard -----	19	374
Sand, with streaks			Clay, sandy -----	13	387
of clay -----	17	40	Sand and gravel ---	15	402
Sand and gravel ----	22	62	Sand, fine -----	34	436
Sand and gravel,			Clay, sandy -----	6	442
with streaks of			Sand; gravel; clay	25	467
clay -----	16	78	Clay, sandy -----	11	478
Sand and gravel ----	42	120	Clay, sandy, with		
Sand, with streaks			streaks of sand -	72	550
of clay -----	19	139	Sand, hard -----	5	555
Clay -----	6	145	Rock -----	5	560
Gravel and sand ----	50	195			
Clay -----	6	201			
Clay; sand; gravel -	39	240			
Sand, hard; gravel -	20	260			
Clay, sandy -----	74	334			
Clay -----	13	347			

9N/14W-30K1. Altitude 2,638.8 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 703 ft; perforated 340-703 ft.

Soil, surface -----	10	10	Sand; gravel; clay;		
Sand and gravel ----	5	15	rocks -----	41	109
Sand; gravel; rock -	14	29	Sand; small gravel,		
Sand and gravel,			with thin streaks		
with streaks of			of clay -----	73	182
clay -----	6	35	Sand, hard -----	8	190
Sand, hard; hard			Sand, with thin		
boulders -----	33	68	streaks of sandy		
			clay --- -----	14	204

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Gravel and sand ----	26	230	Clay and sand ----	55	550
Clay -----	17	247	Clay, with streaks of hard sand ---	40	590
Sand, coarse; clay -	53	300	Clay, sandy -----	8	598
Clay, with streaks of sand -----	52	352	Boulders -----	2	600
Sand, hard -----	4	356	Clay, sandy; fine sand -----	10	610
Clay, with streaks of sand -----	84	440	Clay, with thin streaks of sand	93	703
Sand, hard -----	5	445			
Sand, with streaks of clay -----	50	495			

9N/14W-31K1. Altitude 2,604.3 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 675 ft; perforated 334-675 ft.

Soil, surface -----	5	5	Clay, with streaks of sand -----	20	310
Sand and gravel ----	15	20	Gravel, with streaks of clay	50	360
Clay, sandy; sand --	70	90	Clay and gravel --	140	500
Gravel, with streaks of clay -----	20	110	Sand, with light streaks of clay	65	565
Clay and gravel, with streaks of sand -----	125	235	Clay, sandy; sand	55	620
Clay, with streaks of sand -----	45	280	Clay, with streaks of sand and some white clay -----	55	675
Sand, hard -----	10	290			

9N/14W-31K2. Altitude 2,604.0 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 600 ft; perforated 300-600 ft.

Hardpan -----	5	5	Sand, hard -----	20	280
Soil, sandy -----	5	10	Sand, with streaks of clay -----	45	325
Sand -----	10	20	Sand, hard -----	9	334
Sand, with thin streaks of clay --	42	62	Clay -----	6	340
Clay -----	7	69	Sand, hard -----	11	351
Sand and gravel, with thin streaks of clay -----	52	121	Clay, with streaks of sand -----	61	412
Clay -----	9	130	Sand, hard, with streaks of clay	38	450
Sand, with streaks of clay -----	50	180	Sand, with streaks of clay -----	55	505
Clay, with streaks of sand -----	30	210	Clay and sand, with streaks of hard sand -----	95	600
Sand, with streaks of clay -----	50	260			

Thickness Depth		Thickness Depth	
(feet)	(feet)	(feet)	(feet)

9N/14W-31M1. Altitude 2,613.9 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 713 ft; perforated 347-713 ft.

Sand and silty clay	20	20	Sand, with streaks of hard brown clay	293	518
Sand and small gravel -----	75	95	Sand, coarse, with streaks of clay --	62	580
Sand, fine, with some small gravel and streaks of silty clay -----	123	218	Sand, with streaks of clay -----	114	694
Sand, hard -----	7	225	Clay, with very little sand -----	19	713

9N/14W-34M1. Altitude 2,540.9 ft. Drilled by Evans Bros. Drilling Co. 10-inch casing to 399 ft; perforated 211-399 ft.

Sand and boulders --	30	30	Clay, sandy -----	8	232
Sand -----	5	35	Boulders, with streaks of clay --	28	260
Boulders and sand --	20	55	Sand, with streaks of clay -----	12	272
Clay -----	30	85	Sand, hard -----	11	283
Sand -----	10	95	Clay -----	15	298
Gravel -----	16	111	Boulders, with streaks of hard sand -----	10	308
Boulders -----	9	120	Clay, with occasional boulders -----	40	348
Clay -----	8	128	Clay, with streaks of sand -----	11	359
Sand, hard -----	7	135	Boulders, with streaks of sand and gravel -----	40	399
Clay, with streaks of gravel -----	15	150			
Clay, sandy -----	13	163			
Gravel, with streaks of sand -----	19	182			
Clay -----	18	200			
Sand -----	17	217			
Boulders, with streaks of sandy clay -----	7	224			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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9N/14W-36G1. Altitude 2,465.4 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 821 ft; perforated 327-821 ft.

Clay and sand -----	40	40	Sand, packed -----	20	480
Sand -----	26	66	Clay -----	20	500
Clay -----	14	80	Sand -----	10	510
Sand -----	10	90	Gravel -----	8	518
Gravel -----	10	100	Clay -----	8	526
Sand -----	10	110	Shale, hard -----	6	532
Clay -----	20	130	Gravel -----	14	546
Clay, sandy -----	20	150	Clay and sand ----	13	559
Clay -----	15	165	Gravel and fine		
Gravel -----	6	171	sand -----	7	566
Clay, with streaks			Gravel -----	8	574
of fine sand ----	19	190	Boulders and clay	11	585
Clay -----	11	201	Clay, sandy -----	35	620
Shale, brown -----	16	217	Boulders -----	10	630
Gravel and boulders	8	225	Sand, coarse -----	15	645
Shale, brown -----	13	238	Clay -----	14	659
Clay, with streaks			Gravel -----	13	672
of fine sand ----	11	249	Clay, with streaks		
Gravel and boulders	13	262	of gravel -----	8	680
Clay -----	43	305	Clay and coarse		
Sand -----	7	312	sand -----	11	691
Clay -----	21	333	Gravel -----	19	710
Clay, with streaks			Sand -----	25	735
of sand -----	17	350	Gravel and sand --	15	750
Gravel -----	8	358	Sand, coarse -----	10	760
Clay, with streaks			Sand -----	19	779
of gravel -----	12	370	Boulders -----	6	785
Clay and sand -----	10	380	Sand, coarse -----	13	798
Clay -----	20	400	Gravel -----	14	812
Sand -----	10	410	Sand and clay ----	9	821
Clay, sandy -----	10	420			
Clay -----	10	430			
Sand, with streaks					
of clay -----	15	445			
Gravel -----	15	460			

Thickness Depth		Thickness Depth	
(feet)	(feet)	(feet)	(feet)

9N/14W-36M2. Altitude 2,484.3 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 628 ft; perforated 318-628 ft.

Soil, surface; clay	7	7	Sand, with streaks		
Sand -----	33	40	of hard sand ---	19	325
Clay -----	93	133	Sand, with streaks		
Clay, with streaks			of clay -----	288	613
of sand -----	88	221	Sand -----	11	624
Sand -----	22	243	Rock -----	4	628
Sand and clay -----	63	306			

9N/14W-36Q1. Altitude about 2,470 ft. Drilled by Evans Bros. Drilling Co. 14-inch casing to 600 ft; perforated 296-600 ft.

Sand, surface -----	3	3	Sand -----	9	262
Clay, with streaks			Clay -----	25	287
of gravel -----	49	52	Sand; gravel;		
Sand and gravel ----	24	76	streaks of clay	138	425
Clay and sand -----	11	87	Gravel, with		
Boulders and clay --	12	99	streaks of clay	14	439
Clay, with streaks			Gravel and		
of gravel -----	21	120	boulders -----	15	454
Sand and gravel ----	12	132	Clay -----	19	473
Boulders, with			Gravel and sand --	12	485
streaks of clay --	17	149	Clay, with streaks		
Gravel and sand ----	15	164	of sand -----	48	533
Boulders -----	5	169	Sand -----	7	540
Clay and gravel ----	17	186	Gravel -----	12	552
Clay -----	9	195	Clay -----	8	560
Gravel and sand ----	20	215	Sand and clay ----	10	570
Sand and clay -----	15	230	Boulders and		
Sand, with streaks			gravel -----	25	595
of gravel -----	23	253	Clay, sandy -----	5	600

9N/15W-11A1. Altitude 2,953.4 ft. Drilled by Fred Kennedy. 8-inch casing to 760 ft; perforated 600-760 ft.

Soil, surface -----	100	100	Sand and gravel --	160	760
Material, hard and					
dry -----	500	600			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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9N/15W-11R1. Altitude 2,885.2 ft.

Surface formation --	235	235	Clay, sandy -----	17	2,965
Sand and gravel ----	95	330	Sand, hard -----	15	2,980
Sand and yellow clay	178	508	Clay, with streaks		
Sand and gravel ----	12	520	of hard sand ---	38	3,018
Shale and sand			Shell -----	3	3,021
streaks -----	188	708	Sand, hard -----	16	3,037
Clay and sand			Clay, with streaks		
streaks -----	270	978	of sand -----	18	3,055
Clay, tough -----	75	1,053	Clay, sandy -----	8	3,063
Clay and sand -----	337	1,390	Sand, hard -----	9	3,072
Clay, sticky -----	60	1,450	Clay -----	12	3,084
Shell -----	3	1,453	Shell -----	3	3,087
Clay and sand -----	161	1,614	Sand, hard -----	20	3,107
Clay, yellow -----	376	1,990	Clay -----	13	3,120
Shale -----	15	2,005	Clay, sandy -----	15	3,135
Sand, with hard			Sand, hard -----	9	3,144
streaks -----	35	2,040	Shell -----	5	3,149
Clay, sticky -----	35	2,075	Sand, hard -----	10	3,159
Clay, sandy -----	125	2,200	Shale, sandy -----	22	3,181
Clay, sticky -----	45	2,245	Sand, hard -----	10	3,191
Clay, sticky; gravel	55	2,300	Clay, with streaks		
Clay, sticky; sand -	65	2,365	of sand -----	21	3,212
Clay, sticky -----	55	2,420	Shell -----	1	3,213
Sand, hard -----	6	2,426	Sand, hard -----	6	3,219
Clay, sticky -----	49	2,475	Shale, sandy -----	7	3,226
Clay and sand -----	160	2,635	Shell -----	2	3,228
Sand, hard -----	3	2,638	Sand, hard -----	10	3,238
Clay, with streaks			Clay, sticky -----	14	3,252
of hard sand -----	82	2,720	Clay, with streaks		
Sand, hard -----	5	2,725	of sand -----	24	3,276
Clay, sticky -----	20	2,745	Shell, hard -----	7	3,283
Clay and sand -----	30	2,775	Sand, hard -----	10	3,293
Shale -----	15	2,790	Clay and sand -----	6	3,299
Sand, hard -----	25	2,815	Sand, hard -----	79	3,378
Clay -----	15	2,830	No record -----	77	3,455
Clay, sticky, with			Igneous rock -----	371	3,826
streaks of hard					
sand -----	118	2,948			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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9N/15W-12M1. Altitude 2,899.1 ft. Drilled by F. Rottman Drilling Co. 14-inch casing to 697 ft.

Sand, surface; boulders -----	67	67	Clay and boulders, with streaks of sand -----	46	427
Boulders and fine sand -----	22	89	Clay -----	22	449
Boulders and sand --	45	134	Sand, with streaks of clay -----	44	493
Boulders and soil --	23	157	Clay and sand ----	23	516
Boulders and sand --	45	202	Clay and rock ----	45	561
Sand and some clay -	23	225	Clay; sand; bentonite -----	22	583
Granite, decomposed and sand -----	22	247	Sand, fine -----	45	628
Sand; gravel; boulders -----	23	270	Sand and small gravel -----	72	700
Boulders and sand --	22	292			
Clay and decomposed granite -----	23	315			
Clay and boulders --	22	337			
Boulders and sharp sand -----	44	381			

9N/15W-25D1. Altitude 2,689.8 ft. Drilled by F. Rottman Drilling Co. 8-inch casing; perforated 153-344 ft.

Sand -----	70	70	Boulders and gravel	30	220
Sand and gravel ----	30	100	Sand and gravel ---	25	245
Sand and boulders --	30	130	Gravel and clay ---	30	275
Gravel -----	30	160	Clay -----	25	300
Sand and gravel ----	30	190	Gravel and clay ---	44	344

9N/15W-26N1. Altitude 2,642.4 ft. Drilled by Evans Bros. Drilling Co. 8-inch casing to 600 ft; perforated 280-600 ft.

Clay, with some small gravel -----	20	20	Sand and small gravel -----	55	205
Clay -----	30	50	Clay, with streaks of small gravel	15	220
Sand, with streaks of clay -----	60	110	Clay, brown and sandy -----	55	275
Clay, with streaks of sand -----	40	150	Sand and gravel, with streaks of clay -----	50	325

9N/15W-26N1.--Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Boulders and gravel -	4	329	Clay, with thin		
Clay, with streaks			streaks of gravel	27	467
of sand and small			Clay, soft, with		
gravel -----	86	415	streaks of sand -	98	565
Sand -----	25	440	Clay, with streaks		
			of sand -----	35	600

9N/16W-36A1. Altitude about 2,885 ft. Drilled by F. Rottman Drilling Co. 14-inch casing to 605 ft, 12-inch to 1,085 ft; perforated 340-1,085 ft.

Soil -----	30	30	Clay, sandy -----	22	437
Clay -----	5	35	Clay, with hard		
Sand -----	12	47	streaks -----	8	445
Clay, soft; sand ---	18	65	Clay, sandy -----	14	459
Clay, soft -----	20	85	Sand, with some		
Gravel -----	35	120	clay -----	11	470
Sand and gravel ----	19	139	Clay, hard -----	10	480
Sand, with streaks			Sand, with soft		
of clay -----	15	154	streaks of clay	30	510
Sand, with streaks			Clay, sandy -----	11	521
of clay and gravel	18	172	Sand, with streaks		
Sand, coarse -----	6	178	of clay -----	19	540
Sand, with streaks			Sand -----	15	555
of clay -----	9	187	Clay, sandy -----	15	570
Clay -----	4	191	Clay, with streaks		
Sand; gravel; rock	7	198	of sand -----	10	580
Sand, with streaks			Clay, soft -----	12	592
of clay -----	29	227	Clay, with some		
Sand, coarse, with			rock -----	8	600
streaks of clay --	16	243	Clay and rock ----	20	620
Clay -----	7	250	Clay, with some		
Sand, coarse, with			gravel -----	21	641
streaks of clay --	20	270	Clay and gravel		
Sand, coarse -----	15	285	streaks -----	12	653
Clay, with streaks			Clay; gravel; sand	16	669
of sand -----	12	297	Clay -----	6	675
Sand and gravel ----	8	305	Gravel, with sand		
Clay, sandy -----	12	317	and clay streaks	35	710
Clay and sand streaks	23	340	Gravel and sand --	12	722
Sand and gravel ----	5	345	Sand and gravel,		
Sand, coarse -----	8	353	with streaks of		
Clay, sandy -----	29	382	clay -----	17	739
Clay and sand streaks	33	415			

9N/16W-36A1.--Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand, coarse, with streaks of clay --	22	761	Sand and gravel, loose -----	40	1,046
Sand; clay; rocks --	36	797	Sand and gravel, with streaks of clay -----	34	1,080
Sand, hard -----	7	804	Sand and gravel --	7	1,087
Rocks and sand -----	3	807	Clay -----	8	1,095
Sand and gravel, with streaks of clay --	28	835	Sand; gravel; streaks of clay	15	1,110
Gravel -----	55	890	Clay, blue, with streaks of sand	2	1,112
Clay -----	6	896	Clay, blue -----	6	1,118
Gravel -----	80	976			
Sand and gravel, loose -----	11	987			
Sand and gravel streaks -----	19	1,006			

9N/16W-36C1. Altitude about 2,925 ft. Drilled by F. Rottman
Drilling Co. 14-inch casing to 538 ft, 12-inch to 1,020 ft; perforated
346-1,020 ft.

Soil, surface -----	6	6	Sand and clay ----	18	550
Sand and gravel ----	24	30	Sand -----	11	561
Rocks -----	5	35	Clay, soft -----	19	580
Gravel -----	45	80	Clay, sandy -----	15	595
Clay -----	30	110	Gravel, fine ----	15	610
Sand and gravel ----	40	150	Clay, sandy -----	20	630
Clay, sandy -----	12	162	Clay, soft -----	5	635
Sand, coarse -----	27	189	Gravel, fine ----	35	670
Sand and clay streaks	30	219	Clay, mixed with gravel -----	30	700
Clay, hard -----	12	231	Clay, hard -----	7	707
Sand and clay streaks	40	271	Gravel, fine ----	13	720
Clay, hard -----	9	280	Clay, soft -----	9	729
Clay, sandy -----	20	300	Clay, sandy -----	12	741
Clay, hard -----	21	321	Clay and gravel --	19	760
Sand, hard-packed ---	19	340	Sand and clay streaks -----	25	785
Sand and clay streaks	22	362	Sand and gravel --	20	805
Sand and gravel ----	22	384	Sand, coarse -----	22	827
Sand, coarse -----	11	395	Sand -----	16	843
Sand and clay streaks	20	415	Sand and clay streaks -----	19	862
Clay and rocks -----	8	423	Sand and gravel --	23	885
Sand and gravel ----	44	467	Sand and clay streaks -----	8	893
Clay, soft -----	5	472			
Sand and clay streaks	44	516			
Clay, soft -----	16	532			

9N/16W-36C1.--Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand; gravel; clay streaks -----	13	906	Gravel, fine -----	11	1,020
Sand and gravel -----	22	928	Clay, white and chalky -----	19	1,039
Clay and gravel -----	9	937	Sand and clay -----	8	1,047
Sand and gravel -----	8	945	Clay and sand streaks -----	18	1,065
Sand, coarse -----	18	963	No record -----	34	1,099
Sand and clay streaks	46	1,009			

9N/17W-15Q1. Altitude about 3,500 ft.

Sand, buff; clay ----	75	75	Shale, gray, with streaks of hard shells -----	400	1,500
Boulders, with streaks of clay ---	15	90	Sand, gray and arkosic -----	30	1,530
Sand, buff; clay ----	90	180	Shale, gray and tight -----	60	1,590
Clay, blue-gray -----	310	490	Sand and boulders, hard and tight --	330	1,920
Clay, gray -----	120	610	Boulders, hard, and sand, gray -----	350	2,270
Clay, gray and sticky	30	640	Boulders, hard ----	13	2,283
Shale, gray, with streaks of hard shells -----	460	1,100			

9N/17W-21F1. Altitude about 3,500 ft.

Granite, decomposed -	317	317			
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9N/17W-22C1. Altitude about 3,400 ft.

Granite wash and boulders, decomposed and surface alluvium --	106	106	Shale, brown and sticky -----	6	288
Sandstone, hard, tight, and abrasive	34	140	Clay, buff and sandy -----	122	410
Sandstone, hard, with streaks of brown clay -----	100	240	Clay, hard, buff and sandy -----	250	660
Sandstone, hard, granitic character	42	282	Clay, red, prominent quartz grains -----	5	665
			Clay, buff -----	105	770
			Clay, buff and sticky -----	260	1,030

9N/17W-22C1.--Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay, gray, with streaks of sand --	30	1,060	Shale, blue-gray and sticky, with streaks of red sand -----	100	1,400
Sand, multicolored -	16	1,076	Sand, with reddish quartz grains ---	22	1,422
Clay, greenish-blue	42	1,118	Shell, hard -----	3	1,425
Claystone, greenish- gray -----	65	1,183	Shale, gray, with streaks of red sand -----	26	1,451
Sand, multicolored -	32	1,215	Shale, gray -----	16	1,467
Clay, gray-blue and sticky -----	30	1,245	Shale, gray, with streaks of sand	28	1,495
Sand, multicolored -	20	1,265			
Shale, blue-gray, firm to sticky ---	19	1,284			
Sand, multicolored -	16	1,300			

9N/17W-22M1. Altitude about 3,300 ft.

Sand, buff and clay -	50	50	Shale, gray -----	23	1,273
Sand, buff; boulders	130	180	Shale, black -----	50	1,323
Boulders, with streaks of buff clay -----	60	240	Shale, gray -----	12	1,335
Clay, brown and sticky -----	98	338	Shale, brown and hard -----	83	1,418
Clay, blue and sticky	60	398	Shale, blue-gray and soft -----	16	1,434
Shale, dark gray ----	62	460	Shale, gray, with streaks of hard shells -----	61	1,495
Shale, light gray ---	170	630	Shale, gray -----	25	1,520
Shell, hard lime ----	4	634	Sandstone, hard ---	15	1,535
Shale, gray -----	21	655	Shale, gray -----	85	1,620
Shale, blue-gray ----	39	694	Siltstone, gray ---	73	1,693
Shell, hard lime ----	4	698	Shell, hard -----	1	1,694
Shale, black-gray ---	36	734	Siltstone, gray ---	456	2,150
Shale, gray -----	43	777	Sand, arkosic and multicolored ----	23	2,173
Shale, blue-gray ----	122	899	Siltstone, gray ---	12	2,185
Shell, hard lime ----	3	902	Sand, multicolored, hard and tight; streaks of gray shale; hard shells -----	200	2,385
Shale, dark blue and sticky -----	202	1,104			
Shale, dark blue ----	73	1,177			
Shell, hard lime ----	4	1,181			
Shale, gray -----	36	1,217			
Shale, medium hard, gray -----	33	1,250			

Thickness Depth		Thickness Depth	
	(feet)	(feet)	(feet)

9N/17W-22M2. Altitude about 3,300 ft.

Sand, granitic; gravel; streaks of clay -----	65	65	Clay, buff and sticky -----	5	670
Sand, buff -----	42	107	Sand, buff -----	10	680
Sand, buff, with streaks of clay --	143	250	Clay, buff -----	14	694
Sand, buff, with streaks of hard cemented sandstone	50	300	Sandstone, buff, hard and cemented	62	756
Clay, sandy and buff colored -----	68	368	Sandstone, buff; hard boulders ---	35	791
Shell, hard -----	1	369	Clay, buff -----	9	800
Clay, sandy and hard with streaks of hard shells -----	296	665			

9N/17W-27J1. Altitude about 3,160 ft.

Granite, decomposed	523	523	Sand, hard, coarse	4	957
Clay, red -----	13	536	Clay, yellow and sticky -----	20	977
Shell, hard -----	1	537	Sand, coarse -----	5	982
Clay, red -----	17	554	Clay, yellow and sticky -----	16	998
Gravel, coarse -----	5	559	Sand, hard -----	4	1,002
Clay, red and sandy	56	615	Clay, yellow and sticky -----	14	1,016
Clay, yellow -----	31	646	Sand, coarse -----	6	1,022
Sand, coarse -----	10	656	Clay, yellow and sticky -----	14	1,036
Clay, yellow -----	76	732	Sand, hard; rock -	10	1,046
Sand and rock -----	10	742	Clay, yellow and sticky -----	29	1,075
Sand, fine, hard and white -----	23	765	Clay, sandy -----	5	1,080
Clay, sandy and yellow -----	15	780	Clay, yellow and sticky -----	12	1,092
Clay, yellow and sticky -----	31	811	Sand, hard, gray -	2	1,094
Sand, coarse; rock -	4	815	Clay, yellow and sticky -----	3	1,097
Sand, hard; rock ---	57	872	Sand, fine -----	8	1,105
Sand, fine -----	14	886			
Sand, coarse -----	14	900			
Clay, yellow and sticky -----	53	953			

Thickness		Depth	Thickness		Depth
(feet)		(feet)	(feet)		(feet)
Clay, yellow, sticky	3	1,108	Sand, hard, gray --	6	2,644
Sand, fine -----	2	1,110	Shale, sandy, blue	72	2,716
Clay, yellow, sticky	18	1,128	Sand, gray -----	4	2,720
Sand, fine -----	10	1,138	Shale, sandy, blue	25	2,745
Shell, hard -----	3	1,141	Sand, fine, hard		
Clay, yellow, sticky	9	1,150	and gray -----	4	2,749
Sand, fine -----	3	1,153	Shale, blue -----	79	2,828
Clay, yellow, sticky	2	1,155	Shale, sandy, blue	129	2,957
Sand, coarse -----	7	1,162	Shale, light blue -	46	3,003
Clay, yellow, sticky	14	1,176	Shale, blue, sticky	18	3,021
No record -----	654	1,830	Shale, light blue -	55	3,076
Sand, coarse -----	6	1,836	Shale, dark blue --	12	3,088
Shale, blue -----	6	1,842	Shale -----	59	3,147
Sand -----	18	1,860	Shale, light blue -	6	3,153
Shale, blue, sandy -	18	1,878	Shale, sandy, blue	82	3,235
Shale, black -----	59	1,937	Shale, blue -----	85	3,320
Sand, coarse -----	4	1,941	Shale, hard, blue -	20	3,340
Shale, black -----	17	1,958	Shale, blue, with		
Sand, gray -----	7	1,965	streaks of shells	24	3,364
Shale, blue, sticky	45	2,010	Shale, light blue -	26	3,390
Sand, gray -----	5	2,015	Shale, dark blue --	80	3,470
Shale, black -----	45	2,060	Sand -----	2	3,472
Sand, coarse -----	5	2,065	Granite, decomposed	5	3,477
Shale, blue -----	9	2,074	Sand -----	10	3,487
Sand, coarse -----	6	2,080	Shale, blue -----	2	3,489
Shale, dark, sandy -	42	2,122	Sand -----	5	3,494
Sand, coarse -----	18	2,140	Shale, blue -----	13	3,507
Sand, fine and gray	55	2,195	Sand -----	6	3,513
Shale, black -----	25	2,220	Shell -----	4	3,517
Sand, gray -----	13	2,233	Shale, blue, hard -	3	3,520
Shale, black -----	7	2,240	Shell -----	2	3,522
Sand, gray -----	15	2,255	Shale, blue -----	8	3,530
Shale, sandy, black	30	2,285	Shell -----	2	3,532
Sand -----	5	2,290	Shale, blue -----	15	3,547
Shale, sandy, blue -	2	2,292	Sand, gray -----	3	3,550
Sand -----	4	2,296	Sand, hard; rock --	7	3,557
Shale, sandy, blue -	60	2,356	Shale, blue -----	11	3,568
Sand, coarse -----	10	2,366	Clay, red, sticky -	5	3,573
Shale, sandy -----	24	2,390	Shell -----	2	3,575
Sand, coarse -----	10	2,400	Shale, blue, sticky	22	3,597
Shale, sandy, blue -	14	2,414	Shell, sandy -----	16	3,613
Sand, coarse -----	14	2,428	Shale, sandy -----	6	3,619
Shale, brown, sandy	32	2,460	Limestone -----	4	3,623
Shale, hard, blue ---	15	2,475	Shale, blue, sandy	3	3,626
Shale, hard, blue,			Shale, soft, sandy	7	3,633
with some sand ---	56	2,531	Sand, hard -----	11	3,644
Shale, sandy, blue -	107	2,638	Shale, brown -----	8	3,652

9N/17W-27J1.--Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand, hard -----	10	3,662	Shale, blue, sandy	3	3,929
Shale, brown -----	3	3,665	Sand, hard -----	6	3,935
Shell -----	2	3,667	Shell, sandy, hard	2	3,937
Sand, soft -----	11	3,678	Sand -----	6	3,943
Shale, sandy -----	5	3,683	Shale, sandy, blue	7	3,950
Sand, hard -----	53	3,736	Limestone, blue ---	3	3,953
Clay, red, sticky --	4	3,740	Shale, sandy, blue	13	3,966
Sand, hard -----	41	3,781	Clay, red, sticky	3	3,969
Clay, red, sticky --	1	3,782	Sand, hard -----	17	3,986
Sand, gray -----	8	3,790	Lime, blue -----	3	3,989
Sand, soft, coarse -	20	3,810	Sand -----	20	4,009
Sand, hard -----	9	3,819	Shale, sandy -----	21	4,030
Limestone -----	3	3,822	Clay, red, sticky	5	4,035
Sand, hard -----	8	3,830	Limestone -----	1	4,036
Clay, red, sticky --	3	3,833	Shale, sandy -----	26	4,062
Sand, gray -----	17	3,850	Sand, coarse, soft	16	4,078
Shell -----	2	3,852	Sand, hard, gray --	2	4,080
Clay, sandy -----	3	3,855	Limestone -----	10	4,090
Sand, gray -----	34	3,889	Sand, gray -----	19	4,109
Sand, hard -----	3	3,892	Lime, blue -----	7	4,116
Sand, soft -----	18	3,910	Shale, brown -----	14	4,130
Sand, hard -----	3	3,913	Shale, soft, brown	8	4,138
Limestone, blue ----	1	3,914	Shale, sandy,		
Clay, red, sticky --	7	3,921	brown -----	12	4, 150
Shell, sandy -----	5	3,926			

9N/17W-32B1. Altitude about 3,175 ft.

Sand, surface -----	26	26	Shale, gray; hard		
Boulders and sand --	24	50	lime shells -----	380	1,020
Sand and clay -----	22	72	Shale, gray -----	20	1,040
Boulders -----	3	75	Shale, green and		
Clay, brown, sandy -	55	130	sticky -----	5	1,045
Shale, blue-green --	38	168	Shale, blue, sticky	35	1,080
Shale, gray -----	172	340	Shale, gray -----	36	1,116
Gravel; boulders;			Shale, sandy, gray		
sandy clay -----	64	404	and red -----	10	1,126
Shale, sandy, brown	66	470	Shale, gray and red	20	1,146
Clay, yellow -----	23	493	Boulders, hard ----	15	1,161
Boulders; gravel ---	24	517	Shale, hard; sand -	34	1,195
Shale, sandy, brown;			Sand, hard;boulders	17	1,212
boulders -----	23	540	Shale, hard -----	8	1,220
Boulders and sand --	6	546	Boulders -----	20	1,240
Clay, sandy; shale -	40	586	Sand, hard and red	22	1,262
Shale, dark brown,			Sand, hard; shale -	32	1,294
sticky -----	54	640			

9N/17W-32B1.---Continued.

Thickness Depth			Thickness Depth		
Sand, hard; shale; boulders -----	36	1,330	Shale, sandy, hard	23	1,465
Sand, hard; shale --	28	1,358	Sand, hard -----	15	1,480
Shale, medium-hard and red -----	9	1,367	Sand, hard; shale; boulders -----	20	1,500
Sand, hard; boulders	30	1,397	Sand, hard and boulders -----	13	1,513
Sand, extremely hard and shale -----	23	1,420	Granite, decomposed	41	1,554
Shale, sandy and extremely hard ---	22	1,442			

9N/17W32B2. Altitude about 3,175 ft.

Sand, surface -----	24 $\frac{1}{2}$	24 $\frac{1}{2}$	Shale, hard, gray -	2	1,200
Boulders and clay --	78 $\frac{1}{2}$	103	Granite, decomposed	28	1,228
Clay, sandy, brown -	21	124	Shale, hard; boulders -----	35	1,263
Clay, hard, red and sticky -----	7	131	Granite, decomposed with streaks of shale -----	27	1,290
Shale, blue-green --	222	353	Shale, hard, with gray sand -----	17	1,307
Shale, brown -----	23	376	Shale, hard; boulders -----	6	1,313
Boulders -----	5	381	Shale, red and soft	2	1,315
Shale, hard -----	39	420	Shale, hard -----	15	1,330
Shale, hard; shells	95	515	Shale, hard; boulders -----	20	1,350
Shale, gray; shells	165	680	Sand, red, with streaks of sticky shale -----	77	1,427
Shale, blue-gray --	46	726	Sand, hard; quartz	20	1,447
Shale, hard, sandy and gray -----	40	766	Sand, soft; quartz	9	1,456
Shale, sticky, gray	69	835	Sand, hard; quartz	62	1,518
Shale, gray, with hard lime shells	242	1,077	Granite -----	84	1,602
Shale, gray, hard and sticky -----	40	1,117			
Shale, red; gray sand -----	20	1,137			
Granite, hard and decomposed -----	61	1,198			

Thickness (feet)	Depth (feet)	Thickness (feet)	Depth (feet)
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10N/14W-27M1. Altitude about 3,108 ft.

Sand; gravel; clay	1,718	1,718	Sand, with streaks		
Lime rock, hard ----	124	1,842	of shale -----	99	3,375
Lime rock, hard,			Shale, very hard		
soft streaks -----	35	1,877	and sandy -----	62	3,437
Shale, brown, with			Shale, hard; lime		
hard streaks of			rock -----	162	3,599
lime -----	7	1,884	Limestone, very		
Lime rock, hard ----	212	2,096	hard -----	131	3,730
Lime rock, sandy ---	13	2,109	Limestone, sandy,		
Sand and lime -----	51	2,160	with very hard		
Limestone, hard ----	50	2,210	streaks -----	183	3,913
Lime, hard; sand ---	90	2,300	Conglomerate, with		
Lime, very hard with			very hard streaks	107	4,020
sand -----	15	2,315	Shale, blue, sandy	19	4,039
Shale, very hard and			Shale, blue, sandy		
white -----	4	2,319	with hard streaks	29	4,068
Shale, white -----	57	2,376	Conglomerate, with		
Shale, blue -----	138	2,514	streaks of shale	18	4,086
Shell, hard -----	15	2,529	Conglomerate, with		
Shale, hard, blue;			large amounts of		
with streaks of			sand -----	12	4,098
sand -----	179	2,708	Conglomerate -----	6	4,104
Shale, blue, sandy	137	2,845	Shell, very hard --	3	4,107
Shale, sandy and			Sandstone, very		
blue-gray -----	111	2,956	hard -----	6	4,113
Shale, blue-gray			Shell, hard -----	3	4,116
and very hard ----	84	3,040	Unknown material,		
Shale, blue-white --	236	3,276	very soft -----	10	4,126

APPENDIX D

TABLE 4. CHEMICAL ANALYSES OF WATER FROM WELLS

1. The following information is being provided for your information and is not to be used for any other purpose.

U.S. Department of Agriculture; DWR California Department of Water Resources; FC Los Angeles County Flood Control District; GS U.S. Geological Survey; HL Hinkley Laboratory, Inc.; Bak Radi Ltd., Calif.; Eli Lilly and Company; Health Department.

Well number	Date of collection	Depth of well (feet)	Water temperature (°F.)	Results in parts per million														Percent sodium	Specific conductance (micromhos at 25°C)	pH	Laboratory and Lab. number		
				Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate(HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Calculated (Sum of determined constituents)					Residue on evaporation at 180°C	Hardness as CaCO ₃
U.S. Public Health Service drinking-water standards (1962)																							
7N/1W-6A1	8-15-50				0.3	112	27	866		6208		106	250	0.7	15	0.1	500	500	391		27	1,110	7.8 DWR 771
7H	4-12-44	450				66	6.7	34		146	0	15	28		32	.14	188					421	7.7 DA 18034
7J1	5-27-67	451				122	22	51	1.5	311	0	36	44	0.1	29	.20	404	434	270	15	29	700	7.5 DWR L4491
9B2	7-12-44					116	65	865		6223		90	163		28	.18	600		395		27	1,340	8.0 DA 18035
9Z1	4-12-44					36	12	841		772	6	248	335		133	2.23	1,690		557		61	2,020	8.3 DA 18034
2Z1	1-1-51	227			0.05	69	17	869		146	0	31	18		30	.02	416	267	139		39		CS
7N1	8-15-50					44	19	17		144		64	28		10	.05	253	208	188		16		7.8 FC 1569
7N/1W-10F1	7-1-50					100	37	7		160	0	224	46		5		490	430	402		4		FC 1695
	6-1-50					35	13	34		144	0	25	25		1.3	.07	273		141		34		9.0 DWR 977
	8-4-50					33	8	26	1.7	137	0	19	20		20	.04	267	215	116		34		7.5 DWR 371
	11-19-53					35	6	27	1.2	137		26	16		20	.05	269	234	113		34		7.6 DWR R-397
	10-1-54					31	9	30	2.0	151	0	17	19		17	.05	305	225	115		36		7.6 DWR T-5349
	12-18-56					31	9	30		151	0	17	19		17	.05	305	225	115		36		DWR T-161
	3-7-57		58			30	7	26	1.6	153	0	12	16		20	.02	277	209	103	0	35		7.4 DWR R-3509
	8-18-60					29	6	27		128	0	12	14		20		274	204	100		37		7.1 DWR 12902
	6-11-61									131		13	13		26	0			47				7.6 DWR 2597
	4-17-61									126	0	13	13		26								
15Q	1-1-58	287																261					CS
14F1	1-1-59	100																261					CS
15W-1F1	1-1-58	300																261					CS
6G	1-1-58	70																261					CS
6G2	1-1-58																	262					CS
8H	1-1-58		74			50	7	38	1.1	140	0	37	35		12	0	274	262			34		DWR R-3509
	3-1-58		74			46	8	47	1.5	140		36	43		6	.62	283	262			4		7.8 DWR 441
8K1	11-1-58	450	74			32	5	60	1.2	143	0	48	44		2	.27	262	311			5		7.3 DWR R-3509
	3-1-58	450	72			45	9	68	1.9	168	0	78	56		7.5	.66	350	370			4		7.7 DWR 601

Table 4 ---Chemical analyses of water---Continued

Well No.	Date	Depth	OF	SiO ₂	Fe	Ca	Mg	Na	K	HCO ₃	CO ₃	SO ₄	Cl	F	NO ₃	B	Sum	Residue	Hardness	Non-carbonate	%Na	Spec. cond.	pH	Lab. and No.
8N/13W-23M1	11-20-53					107	16	70	2.5	242	0	163	82	0.3	14	0.48	575	620	333	135	31	936	8.0	DWR 3736
	10-19-54					38	4	50	1.4	140		34	43	.85	10	.45	250	307	114	0	48	476	8.0	DWR R-396
	12-19-56			27		71	15	61	2.3	209	0	102	63	.5	10	.4	455	500	239	67	36	600	8.0	DWR T-5362
	3-14-57			26		82	18	73	2.7	232	0	132	75	.2	10	.18	533	608	279	89	36	910	7.6	DWR T-152
	9-4-58		74	25		57	10	52	2.4	189	0	69	48	.2	6.2	.20	363	372	185		37	594	7.6	DWR T-2467
	7-6-59		74	30		47	7	50	2.2	166	0	53	41	.6	8	.26	321	295	144	0	42	494	7.2	DWR 10417
	8-16-60			2.2		27	9	47	1.2	126	0	34	40	.6	11	.36	234	340	104	0	49	399	7.7	DWR L-243
6-11-61			25		27	6.2	52	1.5	132	0	36	37	.59	7	.30	258	250	93	0	54	415	7.3	DWR 12871	
8N/13W-32N2	6-4-53	603	68			48	7.1	52	2.0	185	0	24	47	.5	20	.1	292	295	150		43	525	7.5	DWR P-685
	10-19-54	603	72			54	7	51	1.4	183		34	50	.45	24	.35	312	350	164		40	522	8.0	DWR R-392
	12-18-56	603	64	28		124	30	80	2.3	377	0	101	135	.4	19	.3	706	825	433		28	1,140	7.4	DWR T-5344
	12-18-56	603	64	30		113	27	72	2.3	315	0	97	128	.4	22	.26	647	730	393		28	990	7.5	DWR 7727
	3-6-57	603	58			124	26	71	2.1	360	0	81	117	.6	26	.11	625	670	417		27	980	7.6	DWR R-1495
	9-5-58	603	71	30		55	10	55	2	205	0	39	56	.6	20	.34	368	385	178		40	598	7.6	DWR 9448
	7-9-59	603	72			46	13	51	1.6	200	0	34	50		18	.3	342	346	170	0	39	558	7.2	DWR 10411
8-15-61	603	72	34		59	11	58	1.6	207	0	43	42	.7	23	.4	387	362	168		39	600	7.7	DWR 12882	
4-17-62	603	70	32						221		0	43	49	.6				193		12			DWR 2594	
33Q3	3-8-56		68			50	10	63	1.0	220	0	40	54	.8	12	.64	339	380	166		45	535	7.7	DWR 6900
8N/14W-11G1	8-15-53					11	1.5	80	1.8	137		27	39	1.4	7.4	.16	236	265	34		83	418	7.8	DWR
	11-20-53	500	73			36	3	38	2.3	173	0	23	11	.3	15	.08	214	233	102		83	368	7.7	DWR 3732
	12-19-56	500	73							172	0	20	19					98						DWR T-5342
	9-5-58	500	79	29		35	6	41	1.5	180	0	25	20	0	0	.3	247	258	111		44	402	7.6	DWR T-2474
	10-10-60	500								174	0	16	16					113		0		416	7.5	DWR R-3504
	5-4-62	500								178	0	14	14					113		0		382	7.3	DWR 12872
		500										0	14									412	7.8	DWR 2590
8N/14W-18N1	1-4-56		76			34	4	43	2.5	174	0	11	18	.3	18	.02	217	251	101		47	400	8.2	DWR R-909
	3-8-56		72			32	4	42	1.7	173	0	15	18	.5	18	.18	216	255	96		48	357	8.0	DWR 6904
	3-6-57		76	31		16	2	74	2	153	18	17	20	.7	16	.10	272	272	48		76	420	8.4	DWR T-155
23A1	8-23-50				53	9	43		201		35	27		8.8	.24						47	7.9	DWR 976	
36E1	8-17-60			37		37	7	32	1.6	137	0	26	27	.4	11	.03	246	241	123	10	35	381	7.7	DWR R-3521
8N/15W-10P1	11-20-53					34	7	38	1.7	161	0	30	15	.5	20	.02	225	243	114		42	392	7.6	DWR 3727
	10-19-54					36	6	38	1.2	156	0	24	14	.35	17	.13	214	259	113	0	42	380	8.1	DWR R-406
	12-18-56		72							156	0		19					111		0		380	7.6	DWR T-5340
	9-4-58			37		31	8	39	1.0	165	0	25	21	.1	0	.20	243	337	110	0	43	534	7.4	DWR T-2475
	7-8-59									159	0	17	17						110	0		382	7.4	DWR 10403
	8-16-60									149	0	16	16					113		0		396	7.8	DWR R-3496
	4-17-61									156	0	15	15					112		0		380	7.7	DWR 12884
4-17-62									154	0	17	17					112		0		380	7.8	DWR 2591	
22N1	3-15-49				0	64	18	0		216	0	34	12		Trace	.5	234	254	234				7.3	FC 1354
	9-21-49			0	0	56	18	16		208	0	53	16		5	.5	266	242	214				7.0	FC 1570
	2-21-50									212	0		14											FC 1694
	6-28-50			0	0	104	23	24		212	0	204	14		3	.5	476	388	354				8.2	FC 1970
	8-22-51			0	0	128	8	0		196	12	61	24		10	0	340	402	352				7.1	FC 2992

Chemical analyses
California (CW) 1964
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Table 4.--Chemical analyses of water--Continued

Well No.	Date	Depth	OF	SiO ₂	Fe	Ca	Mg	Na	K	HCO ₃	CO ₃	SO ₄	Cl	F	NO ₃	B	Sum	Residue	Hardness	Non-carbonate	%Na	Spec. cond.	pH	Lab. and No.	
8N/16W-18H1	8-23-50					30	7	448	2.0	183	0	21	11	0.7	12	0.11	219	247	104		50	360	8.4	DMR 974	
	6-4-53					32	4.4	44	1.4	177		19	12		16		218	251	98		49	376	7.8	DMR P-688	
	10-19-54		70			32	6	42	1.1	183		17	9	.9	12	.13	211	300	105		46	377	8.0	DMR R-407	
	3-8-56		58			16	2	81	1.1	216		24	14	.8	8.2	.35	249		48		78	437	7.9	DMR R-1046	
	12-18-56									218								65				390	7.9	DMR T-5346	
	3-6-57		52					77	.7	221								53			0	480	7.7	DMR T-154	
	9-4-58			38		14	5			216		21	15	.40	0	.80	278	278	54		75	443	7.4	DMR T-2476	
	7-9-59									217			14					49			0	428	7.6	DMR 10409	
	6-11-61									210			10					49			0	417	7.0	DMR 12886	
	6-17-62				42		14	2	83		193		25	12	.70	9	.12	283	315	45	0	407	7.2	DMR T-291	
8N/17W-2N1	3-15-49				0	72	19	25		256	0	72	20		5	.5	340	408	258			518	7.2	FC 1353	
	3-1-55					59	11	46	1.9	237	0	66	14	.4	8.9	.26	325	320	193		34		7.7	DMR 5415	
	11E1	3-16-55				62	11	53	1.8	228	0	82	18	.7	14	1.0	352	402	199		36	587	7.6	DMR P-1053	
	12G1	12-29-51			.2	38	8.5	30		189	0	15	18		7.6	.71	211	205	130		34	611	7.3	HL 62702	
9N/13W-20C2	1908																	228						CS	
	11-20-53					41	7	60	2.5	115	0	121	24	.7	10	.22	323	346	131		49	535	7.2	DMR 3734	
	10-19-54					44	6	58	1.9	122		117	23	.7	6.4		317	358	135		48	535	7.6	DMR R-405	
	12-19-56		72			47	6	60	2.0	117	0	138	28		10	.12	366	227	148			500	7.9	DMR T-5364	
	9-4-58			24						98	5	31	25	.6					143			47	500	8.4	DMR R-2229
	7-8-59									117	0	35	31					87			43	571	7.5	DMR 10404	
	8-9-60			27		43	6	59	2.3	110	0	130	21	.8	7.6	.11		352	133		49	534	7.6	DMR R-3462	
	8-9-60			17		47	13	62	3	173	0	119	33	.5	3.1	.25	383	404	171		44	596	7.5	DMR L-253	
	6-14-61			17		23	1	108	1.5	119	0	134	77	4.1	0	2.8	422	368	64		78	610	7.6	DMR L-1448	
	4-18-62			23		21	2	107	2.3	109	0	87	75	3.5	1.2	3.1	378	370	65		75	620	6.6	DMR 2586	
22A1	11-18-54	252				47	10	59	2.2	171	0	108	23	1.2	9.9	.36	345	380	159		44	455	7.9	DMR 5158	
	8-9-60			17		47	13	62	2.6	173	0	119	33	.5	6	.25	385	404	170	28	44	596	7.5	DMR L-253	
	23B2	8-9-60	300		27	79	22	57	3.8	168	0	154	82		11	.44	445	552	285		30	798	7.6	DMR L-250	
		6-14-61	300							156	0		80					270			147	843	7.9	DMR L-1608	
23E1	5-6-63	252		17		34	5	42	2	145	0	48	14	.2	4.9	.1	238	250	106		46	390	8.1	DMR L-4447	
	10-23-50					84	18	63		159		129	96		12	.03	480		284		33	740	8.3	DMR 977	
	9-4-58		76	19		36	10	31	1.6	165	6	38	11	.4	7.6	.12	242	234	131		34	370	8.4	DMR R-2228	
	7-8-59		75							185	0		16		9.4	.25	221	243	130			403	7.2	DMR 10405	
9N/14W-23B1	8-9-60									174	0		14						125		0	397	7.4	DMR R-3439	
	11-20-53	518				40	10	32	2.2	183	0	28	14	.2	17	.20	234	241	141		33	394	7.7	DMR 3735	
	10-19-54	518				39	9	34	1.4	180		25	14	.1	9.4	.25	221	243	134		35	400	7.8	DMR R-409	
	12-19-56	518		21		38	11	34	2	195	0	26	20	.1	9	.20	257	280	140		34	395	8.0	DMR T-5365	
4-18-62	518		22		41	10	33	1.8	185	0	32	16	.2	12	.12	259	238	143	0	33	405	7.9	DMR 2583		

Table 4. --Chemical analyses of water--Continued

Well No.	Date	Depth	Of	SiO ₂	Fe	Ca	Mg	Na	K	HCO ₃	CO ₃	SO ₄	Cl	F	NO ₃	B	Sum	Residue	Hardness	Non-carbonate	%Na	Spec. cond.	pH	Lab. and No.
2N/14W-32C1	12-18-56	970	77	19		17	3	42	1.6	123	0	10	20	0.3	9.1	0	183	220	55		62	250	7.8	DWR T-5441
	9-4-58	970	77	22		26	3	30	1.6	122	3	17	11	.4	15	.07	189	179	87		45	297	8.4	DWR R-2227
	7-8-59	970	76							134	0		14						55			289	6.8	DWR 10401
	8-9-60	970								128	0		11						58		0	287	7.4	DWR R-3440
32D1	6-14-61	970								132	0		10						54			286	7.0	DWR 12879
	12-15-53	500				37	6	28	1.2	163	0	15	13	.2	12	.08	193	197	117		34	347	7.6	DWR 3733
	10-20-54	500	72			40	4	30	.5	165	0	19	14	.4	14	.01	203	227	116		35	343	8.0	DWR R-399
	3-8-56	500	54							168	0		14						110			356	7.2	DWR R-1047
32D1	9-4-58	500		24		37	5	24	.9	140	3	17	11	.1	13	.07	204	210	115		31	333	8.4	DWR R-2226
	7-8-59	500	76							144	0		15						83			313	6.8	DWR 10400
	6-14-61	500		19		37	5	30	1.1	159	0	15	21	.2	11	.04	219	242	114		36	347	8.2	DWR L-1607
	4-17-62	500		23		34	6	33	.9	155	0	21	14	.1	11	0		206	112		39	331	7.9	DWR 2593

APPENDIX E

TABLE 5. PUMPING TESTS OF WELLS

Table 5.--Pumping tests of wells

Source of data: D driller; O owner; P pump company; SCE Southern California Edison Co.; SCS U.S. Department of Agriculture, Soil Conservation Service; and GS U.S. Geological Survey.

Depth of well: The depth shown is that reported by the agency making the test.

Water level: Depths to water as reported by agency making test, except those preceded by the letter a which indicates a change to show depth to water below land-surface datum, as given in table 2.

Drawdown: The drawdown is the difference, in feet, between the water level measured in the well before pumping and that measured during pumping. In many cases, the drawdown would have been greater if the well had been pumped longer. Also for some measurements the drawdown reported in the table may be less than the actual drawdown because in some instances the measurement of water level was made several minutes after completion of the test and reflects the water level during recovery, not during pumping.

Specific capacity: The specific capacity of the well is obtained by dividing the pumping rate, in gallons per minute, by the drawdown, in feet. Because the drawdown listed is not always the true drawdown, the specific capacity, in many cases, may be different than is shown in the following tabulation.

Horsepower: The number indicates the horsepower rating of electric motors and gas and diesel engines. G indicates a gas engine of unknown horsepower; D indicates a diesel engine of unknown horsepower; W indicates a windmill powered by wind; H indicates that the well is pumped by hand; and S indicates the power is steam.

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
7N/13W- 3D1	SCE	400	4-10-59	500	210	40	12.5	40
3E1		400	1-16-20	675	32	28	24.1	
3N1	SCE	550	5-24-55	1,321	191	14	94.3	100
4J1	SCE	568	4- -53	1,485	125	18	82.5	50
	SCE	568	6-16-59	730				50
	SCE	568	6-12-63	436	228.8	10.4	41.9	50
4J2	D	460	6-18-20	1,125				
4K1	P	496	1955	950	205	30	31.6	60
4K2	D	501½	8-17-20	1,125	40			
5K1	P	495	8-19-49	1,080				60
	P	495	12-15-54	1,170				75
5M1	P	750	6-24-52	1,650				125
5P1	P	504	6-15-49	614	168	12	51.1	50
	P	504	8-15-51	730				50
	SCE	504	6- 2-54	566	216.4	20.1	28.1	60
	P	504	3-29-56	712				60
6G1	P	702	1953	1,350	180	20	67.5	75
6L1		678	8-15-56	1,080	285	33	32.8	100
6P2	D	941	2- -63	1,300	245	45	28.8	220
7A1	P	500	8-20-56	456	268	24	19.0	
7B1	P	610	4-20-55	825				100
7C1	P	665	4-21-56	810	205	22	36.8	75
7H1	SCE	605	8-24-60	631	282.2	11.8	53.4	60
	SCE	605	7- 9-62	529	305.4	10	52.9	60
7H2	SCS	450	9-12-44	673	92	43	15.6	
7J2	P	450	1953	495				40
8B1	O	852	6-27-48	875	291	12	72.9	
		852	5-13-60	1,411	270	28	50.3	

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
7N/13W- 8D1		650	9- 4-57	1,299				
8M1	D	752	1-25-52	2,025	150	45	45.4	
	SCE	752	7-13-60	660	272.4	16.3	40.4	75
	SCE	752	7-10-61	744	283	18.5	40.2	75
8Z1	D	501	3- 8-24	1,170	68			
9B2	P	502	9-12-44	810	100	30	27.0	
9D1	P	490	11- 6-56	810				50
9E1		501	10- 8-20	1,625	45	45	36.1	
9E2	P	506	7-26-56	715	250	52	13.7	60
9G1	SCE	450	5- 5-54	528	450			40
9K1	SCE	500	11- -54	702				40
9Q1	P	492	1947	540				40
16B3		356	1941	819	90	45	18.2	
17B1	SCE	502	5-26-54	239				20
17B2	SCE	600	10- 1-53	972	200	14	69.4	75
	SCE	600	6-17-55	978	227.9	6.9	141	75
	P	600	5- 7-56	1,202	217	15	80.1	100
17D2		504	6- -58	388	260	25	15.5	
17M1	O	602	8-30-55	694				50
	SCE	601	10-25-59	608	245.4	11.8	51.5	50
	SCE	601	9-16-60	566	259	11.6	48.7	
	SCE	601	10-24-61	670	224.2	14.8	45.2	50
	SCE	601	10-24-61	h568	224.2	13.6	41.7	50
17N1	D	602	1-14-53	1,600				
	D	602	4-24-53	850				
	D	602	10-13-53	810				

See footnotes at end of table.

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
7N/13W-20B1	P	307	1-24-56	546	168	2	b273	40
20B2	P	500	4- 9-56	695	169	24	28.9	50
20E2	SCE	605	6-13-56	680				60
20G2	P	400	1- 1-53	405				30
27D1	P	360	4-14-48	425				30
	P	360	10- 9-50	345	a189	37	9.3	30
	P	360	2-22-56	327	a209			30
	SCE	360	11- 7-56	310	a204.6	48.6	6.3	30
27E1	P	400	12- 5-39	862	80	30	28.7	
	P	400	1-14-48	720				40
	P	400	8- -49	800				50
	P	400	5-21-56	526				50
27N1	P	435	4-14-48	510				35
	P	435	3-16-50	341				35
27N3	P	496	2-23-51	810				60
	P	496	5-21-56	578				60
	SCE	496	10-31-56	608	290.4	46.6	13.0	60
27N4	P	435	6-12-46	990				
	P	435	5-12-50	855				60
		435	8-10-57	437				60
28H1	P	530	8-12-53	1,245				125
	SCE	530	6-23-54	1,261				125
7N/14W- 1K1	D	858	12-30-60	1,000	260	16	62.5	220
1R1		735	6-19-56	1,350				125
	P	735	8-23-56	1,350	295	33	40.9	125
10E1		500	5- 1-62	9				1
10F1		365	12-18-56	5	a242.0			5
		365	5- 1-62	8	280.69			1

See footnotes at end of table.

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
7N/14W-13A1	D	519	12-12-52	1,240		26	47.7	
	SCE	519	3-23-53	534				50
	SCE	519	10-14-53	534	219.0	10.5	50.9	50
	SCE	519	9-21-55	475	239.3	10.3	46.1	50
	SCE	519	5-23-56	480	238.1	10.5	45.7	50
	SCE	519	8-28-57	467	251.7	9.9	47.2	50
	SCE	519	11- 3-59	503	238.0	10.0	50.3	50
	SCE	519	11- 2-60	455	249.6	10.8	42.1	50
	SCE	519	5-22-62	462	275.2	11.6	39.8	50
14F1	GS	160	1909	15	120			W
18R1	GS	30.0	4-19-62	1				W
7N/15W-12E2		126	4-18-62	160				10
12H1				1	4.3			
8N/13W- 2C2	GS	420	1920	675	18			
2D1	O	475	1951	600				30
2F1	GS	336	1- -20	234	22			
3M1	SCE	765	8-31-55	1,791	227.9			150
	SCE	765	10- 3-56	1,716	257			150
4B1	SCE	605	10-15-50	1,344	124.5			60
	SCE	605	7- 2-53	1,256	183.8			75
	SCE	605	8- 4-54	1,000	201.0			75
	SCE	605	8-31-55	755	192			75
	SCE	605	10- 3-56	907	214.6			100
4E1	SCE	670	11- -50	1,450	134.3			75
	SCE	670	7-22-53	1,062.9	214			75
	SCE	670	8-10-54	846.9				75
	SCE	670	9-28-55	909.9				75
	SCE	670	10- 3-56	815.4	264			75

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
8N/13W- 4N1	SCE	761	8-29-51	1,800	156			100
	SCE	761	9-10-53	1,320	190			100
	SCE	761	8- 4-54	993	205.5			100
	SCE	761	8-31-55	1,114	212.1			100
	SCE	761	10- 3-56	888	215.8			100
4Q1	SCE	687	8- 4-54	1,365				100
	SCE	687	8-31-55	1,279	250.8			100
	SCE	687	10- 3-56	1,188	257.6			100
5E1	SCE	552	5-22-62	679				75
5F1	SCE		5-15-55	1,800				100
	SCE		5-22-62	1,032				100
5F2		705	5-15-55	3,000				200
		705	9-27-59	1,107	269.8	46.0	24.0	200
	SCE	705	5-22-62	976				100
6E1	SCE	457	8-10-56	705	293	11	27.6	60
6G1	SCE	525	9- 1-54	765	252.8	13.6	56.2	100
	SCE	525	3-26-58	1,215	197.5	23.1	52.6	100
	P	525	5-12-58	1,233				100
6G2	P	690	2-19-59	1,500	205	16	93.7	
	P	690	2-28-59	1,511	203	20	75.5	100
6G3	GS	76	1908	90	60.5			W
6G4	GS	80	1908	90	60.5			W
6H1	GS	100	1920	360	56			
6H2	D	702	4-27-63	900	309	17	52.9	220
6L1	SCE	303	1946	600				40
6M1	SCE	607	5- 2-63	702	306.3	25.4	27.6	75
6N1	SCE	523	10-19-54	1,040	250.8	14.8	70.6	100
	SCE	523	7-25-63	362	329.4	133.4	2.7	100

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
8N/13W- 6R1	D	301	11-10-14	450	72			
7B1	D	496	11-15-60	1,900				
	P	500	1- -61	900	270			
8D3	D	570	8- 1-61	1,000	304	16	62.5	220
8N1	P		1955	500				50
8N3	GS	350	1- -20	630	50			
	P	485	7- 9-52	974				100
	P	485	6-18-53	823				100
	P	485	7-28-55	1,011				100
	P	485	6-21-56	946				100
10D1	O		9-12-56	1,249	158.4	22	56.7	75
10D2	D	540	6-30-59	855	180	105	8.1	75
11E1		375	1-26-47	900	117			40
		375	8- 6-48	900	125			
		375	5- 2-54	900	167			50
11G1	P		1-26-47	1,350	112			75
			4-12-55	1,350				75
	P		4-20-56	1,350				100
11M1		720	7-21-55	1,170	178			75
11Q1		575	4-20-47	1,350				
		575	4-20-56	1,350				75
15E1	SCE	485	9-12-56	580	214.1	32.1	18.0	
		485	4-18-59	620	236.6	65.3	9.5	
		485	7- 7-59	733	239	16	45.8	
		485	11- 5-59	831	226	70	11.9	
		485	5- 6-60	733	235	20	36.6	
	SCE	485	8- 8-63	566	271.1	12.7	44.6	60
15M1	O	551	1953	490				40
	O	551	1953	1,070				60
15N1	SCE	538	1953	985	196.5	31.1	31.6	75

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
8N/13W-16K1	P	443	9-15-53	1,350	205	20	67.5	100
	SCE	443		1,111	251	23	48.3	100
	SCE	443	9-30-58	1,175	234	21	55.9	100
	SCE	443	2-26-59	1,141	250.2	22.6	50.4	100
	SCE	443	10- 3-61	1,170	284			100
	SCE	443	4- 3-63	1,116	270.6			100
17E1	SCE	471	1940	422				75
17E2	SCE	597	9- 5-56	639				75
17F1	SCE	570	9- 5-56	880				100
17G1	SCE	490	1940	648				75
17J1	D	845	8- 4-56	1,700	279	16	106.2	
	SCE	845	9- 5-56	1,409				150
17L1	SCE	504	1945	669				75
17M1	SCE	446	6-15-54	507				75
	SCE	446	9- 5-57	147				25
17N1	SCE	666	9- 5-56	934				150
18K1	P	600	2- -57	1,000				100
18K2	SCE	487	2- -57	720				60
18N1	D	480	7-22-50	1,485	180	40	37.1	D
	SCE	480	2- -57	600				50
18N2	D	499	2- 8-57	1,500				220
18Q2	P	533	2- -57	1,000				100
19B1	SCE		1953	640				50
19C1	SCE	507	1951	1,100	185	55	20.0	75
19D2	SCE		8- -53	540				50

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
8N/13W-19E1	SCE	670	1956	350	228	32	10.9	100
20B1	D	618	12- -52	2,565	165	190	13.5	
	SCE	618	8-20-53	1,114	214.6			75
	SCE	618	11-28-56	1,260	223			100
20B2	O	474	5- 8-47	420				30
20B3	D	680	3- 8-61	1,000	250	17	58.8	220
20D1	P	596	1- 5-50	1,460	a154			75
	SCE	596	9-10-54	1,005	a247			75
20H1		505		810		40	20.2	
20K1	P	603	8- 8-48	1,460	161			100
	P	603	10- 1-52	1,400	204			100
20M1	P	601	8- 8-48	900	159			50
	SCE	601	4-11-52	851	158			75
	P	601	2-15-56	1,274				75
21E1	O	504		595				
21J1	SCE	600	4- 8-59	548	201.4	17.2	31.8	40
21K1	SCE	557	5-11-56	684				40
21Z1	SCE	410	4- 6-54	502	147.5	58.8	8.5	30
22D1	SCE	530	7-17-52	819	174.7	17.5	46.8	50
	SCE	530	3- -58	1,094	160.8	28.8	37.9	50
22K1	P	480	1948	1,200				100
	SCE	480	8- -54	968	a183.4			60
	SCE	480	8- -55	913	a187.4			60
	SCE	480	10- -56	868	a194.2			
22K2	D	573	12-27-62	1,000	201	16	62.5	220
23M1	SCE	450	9-10-53	434	154			50
	SCE	450	3-25-54	551	117.8			50
	SCE	450	8-31-55	350	172.4			50
	SCE	450	10- 3-56	282	181.4			50

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
8N/13W-23M3	D	489	5-12-62	1,000	205	48	20.8	220
29B1	SCE	500	11- -56	368	166.0	15	24.5	40
	SCE	500	10- 3-62	260	204.7	26.8	9.7	40
	SCE	500	10- 3-62	n235	204.7	25.9	9.0	40
	SCE	500	10- 3-62	n209	204.7	23.8	8.7	40
	SCE	500	10- 3-62	n189	204.7	21.9	8.6	40
29M1	D	500	6- -53	1,593	165	37	43.0	
	SCE	500	11- -56	388	198.0	9.7	40	40
30A1	SCE	607	11- -56	301	216.8	7.4	40.7	40
	SCE	607	9-18-57	232	231.0			40
	SCE	607	10- 3-62	321	264.2	8.6	37.3	40
	SCE	607	10- 3-62	n283	264.2	5.6	68.9	40
	SCE	607	10- 3-62	n240	264.2	4.8	50	40
31D1	D	826	2-14-61	1,000	226	16	62.5	220
31M1	SCE	700	2-27-57	1,238	195	15	82.5	75
31N1	P	785	12- -54	2,250	180	20	112.5	150
31Q1	SCE	655	8-30-48	1,350				75
	SCE	655	5-11-56	1,060				75
	SCE	655	10- 2-62	986	293.1	26.0	37.9	100
31R1	SCE	460	11-18-46	500	168	12	41.6	30
	SCE	460	4-11-52	300				15
32D1	SCE	600	8-26-54	1,143	c194.4		150	100
32G1	D	451	4-26-23	1,125	42			
32N1	O	320		495		130	3.8	
32N2	P	603	1953	1,440				100
	SCE	603	3-25-58	1,557	178.0	14.4	108.1	100
	SCE	603	6- 8-61	1,081	272.4	10	108.1	100
33L1	D	450	7- -62	450	239	16	28.1	220
33M1		450	2-18-56	670				60

See footnotes at end of table.

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
8N/14W-	1A1	SCE	8- -55	720	260	60	12.0	75
	1B1	P	440 7- -56	480	270			55
			440 7-31-58	690	295.0			55
	1B2		678 3-29-63	550	300	40	13.7	50
	1C1	P	584 4-25-56	1,018	272.5			100
		SCE	584 7-31-58	909	252.4			100
	1K1	P	365 12- 5-56	720				
	1K2	D	602 1- 4-62	700	294	34	15.9	220
	1L1		701 3-28-63	900	270.5			100
	1N1		617 6-13-52	1,304				75
			617 4- 9-54	1,826				125
	1R1		504 4-10-55	810	197	103	7.86	75
	2J1	SCE	7-12-55	736	241	17	43.2	75
		SCE	7-10-56	603	268	14	43.0	75
		SCE	380 7-24-62	524	307.8	25.8	20.3	75
	2Q1	SCE		950				75
	2Q2	SCE	702 7-18-56	1,549	a266.1	12.8	121.0	125
	5E1	SCE	600 5-22-62	2,070	183.1	21.2	97.6	125
	5H1	O	706 1963	2,100	194	19	110.5	125
	8B1	D	1,036 5-22-58	3,250	175	165	19.7	D
		O	1,036 1962	1,100	215	95	11.6	
	11G1	SCE	512 5- 8-62	649	214.1	24.7	26.2	60
	12A1	O	500 1939	585				

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
8N/14W-13C1	SCE	390	4- 7-54	828	a178.1			
	SCE	390	6-10-55	1,035				60
	SCE	390	8-31-55	648	a201.5	10.6	61.1	
	SCE	390	2- 1-58	807	a207.5	14.6	55.3	
	SCE	390	4-14-60	747	a221.3	12.6	59.3	
	SCE	390	8-24-60	650	a231.5	22.6	28.8	
	SCE	390	4-14-61	647	a227.9	21.2	30.5	
	SCE	390	8-10-61	580	a239.1	21.5	27	
13G1	SCE	485	6- -58	1,109	244	20	55.4	60
13H1	D	528	3-18-63	900	268	28	32.1	220
13N1	SCE	503	8-21-56	1,600	232	20	80.0	125
13P1	SCE	608	9-12-56	1,330	232	44	30.2	150
14F1	D	402	9- 9-61 3-28-63	1,625 675	225	37	43.9	60
14J1	D	450	8-14-50	810	165	20	40.5	
	P	450	3- -61	1,250				125
15B1	SCE	418	11-29-62	1,007	204.1	25.7	39.1	100
	SCE	418	11-29-62	965	204.1	22.7	42.5	100
15G1	D	469	1-30-55	1,881				220
	SCE	469	11-27-62	h1,087	217.0	8.4	129	125
	SCE	469	11-27-62	h1,008	217.0	8.0	126	125
	SCE	469	11-27-62	h916	217.0	7.5	122	125
15G2	D	421	11- -55	1,935				D
	SCE	421	11-27-62	h1,584	207.8	15.2	104.2	150
	SCE	421	11-27-62	h1,535	207.8	14.2	108.0	125
	SCE	421	11-27-62	h1,436	207.8	13.2	108.7	125
17M1	D	828	11-20-58	450	190	368	1.2	220
18N1	D	865	2-19-54	2,250	180	40	56.2	150

See footnotes at end of table.

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
8N/14W-23A1	SCE	325	7-22-52	1,186	174.1	8.1	146.4	75
	SCE	325	4- 7-54	1,204	187.3	8.3	145.1	75
	SCE	325	8- 7-56	979	224.6	10.2	96.0	75
	SCE	325	8- 2-57	919	231.8	11.0	83.6	75
	SCE	325	10- 9-58	858	235.4	11.7	73.3	75
	SCE	325	9- 2-59	903	239.1	11.5	78.5	75
	SCE	325	9-15-60	813	245.4	7.6	107.0	
23B1	SCE	378	7-22-52	241	174.9	31.1	7.7	15
	SCE	378	4- 7-54	219	184.0	26.3	8.33	15
	SCE	378	8- 7-56	177	215.3	36.3	4.9	15
	SCE	378	8-27-57	153	223.2	36.4	5.8	15
	SCE	378	10- 9-58	162	228.0	30.0	5.4	15
	SCE	378	9- 3-59	162	228.6	29.4	5.5	15
	SCE	378	9-15-60	147	233.8	25.6	5.75	15
23G1	SCE	420	7-22-52	714	182.4	25.5	28.0	50
	SCE	420	4- 7-54	658	189.8	25.6	25.7	50
	SCE	420	8- 8-56	493	236.3	21.0	23.5	50
	SCE	420	8-27-57	448	244.0	18.0	24.9	50
		420	10-10-58	467	246.0	18.3	25.5	50
	SCE	420	9- 3-59	411	247.4	19.2	21.4	50
	SCE	420	9-15-60	369	253.6	15.0	24.6	50
23G2	D	396	1- 5-63	1,100	278	23	47.8	220
24C1	SCE	618	6-15-55	809	230.5	69.4	11.6	75
24D1	SCE	300	6-15-55	618	213.8	16.6	37.2	50
24E1	D	436	7-24-59	700	248	14	50.0	220
24M1	SCE	333	7- 1-55	1,850	212.3	21	88.0	150
25A1	D	496	11- 8-60	1,000	250	20	50	W
31P1			4-18-62	1				W
8N/15W- 1E1	SCE	474	3-15-54	1,500	162			
2H1	D	625	5-12-62	1,000	222	31	32.2	D
	SCE	625	4-18-63	1,502				150

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
8N/15W- 2Q1	D	500	1954	900				220
	SCE	500	4-18-63	h689	225.8	176.3	3.9	100
7N1		653	7-19-56	918	206.4	36.8	24.9	75
7P1		750	3- 1-56	1,150				150
10P1		203	11-20-53	3	a147.2			3
22A1		202	1-11-54	365	133	55	6.75	11
		202	5- 5-58	610				15
22A2		425	5- 5-58	610	96	56	10.9	40
	D	425	5- 5-58	550	95	57	9.6	220
24B2		252	3-12-46	270		98.6	2.7	15
24B3	D	700	3- -56	900				220
31Q1	O	3,140	1961	5	170			
33F1	D	801	10-13-55	820	280	70	11.7	
33G2		475	4- -52	1,150	230	100	11.5	
8N/16W- 4N1	SCE	1,000	12- 7-58	1,325	258	34.5	38.4	125
5C1	D	1,000	1-19-59	1,800	e215	90	20.0	125
5M1	P	1,001	11-11-62	1,110	286	80	13.8	125
6D1	P	1,002	11-11-62	1,287	267	83	15.5	125
6G1	P	1,007	11-11-62	726	331			125
6M1	P	600	11-11-62	500	246	27	18.5	100
6Q1	P	1,020	11-11-62	960	252			100
7E1	P	1,006	11-11-62	825	309			100
7G1	P	1,002	11-11-62	820	308			125

See footnotes at end of table.

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power	
8N/16W-	7N1	SCE	1,004	11- 1-60	822	396.3	82.3	10.0	125
		P	1,004	11-11-62	825	396	80	10.3	125
	8G1	P	1,004	11-11-62	1,022	302	80	12.7	125
	8J1	P	1,002	11-11-62	1,150	336	35	32.8	125
	8Q1	P	1,006	11-11-62	1,085	351	35	31.0	125
	14K1	GS	150	1909	4.5	110			W
	17P1		860	1948	1,200				60
	18H1		250		5				1
	22Q4		152	1962	7.5				1
	27A3	D	300		10				
32L2		155	1938	180				3	
8N/17W-	1N1	P	787	8-19-53	790	236			75
		P	787	8-19-54	700	259			75
	2N1	P	1,000	8-19-53	1,820	a247	24	82.7	150
	2N1	P	1,000	8-19-54	1,455	a268	31	47.0	
	2Q1	P	1,019	8-19-53	1,910	248	24	79.6	150
		P	1,019	8-19-54	1,630	275	28	58.2	150
	11E1	P	770	8-19-53	700	272	47	14.9	75
		P	770	8-19-54	665	283	59	11.3	75
	12G1	P	994	11-11-62	865		34	25.4	100
	13H1	SCE	1,087	11- 1-60	539	445.4	161.3	3.3	125
			11-11-62	648	404			125	
8N/18W-	17J1	O	160	1943	400				
		O	160	3-28-62	250	a60.59			25

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
8N/18W-24H1		100		15				1
		100	3-27-62	2	a23.52			W
26D1		154		15				$\frac{3}{4}$
9N/12W-19C2	0	330		630				40
9N/13W-20M1	0	49	1907	4	46			1
20Q1	SCE	420	4-26-62	552	221.6	13.4	41.2	50
	SCE	420	9- 7-62	514	242.7	11.8	43.6	50
22A1		252	7- -46	900	73	32	28.1	
22Z1	GS	35	1907	12	20			S
22Z2	GS	35	1907	12	30			W
23C3	0	254		450				
24A2	0	380	4-25-63	850				50
24C1	0	400	4-25-63	1,458		40	36.4	50
24Z1				810				
26D1	GS	404	1908	720				
27N1		580	5-31-54	1,060	180	19	55.8	75
	SCE	580	10-22-59	1,692	213.6	29.3	57.7	125
	SCE	580	8- -62	1,492	244.6	18.1	82.4	125
28G2	D	486	2-16-63	1,100	229		100	220
28K1	SCE	487	8- -62	1,413				125
28N1	SCE	350	6- 6-62	855	244	40	21.3	100

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
9N/13W-29E1	SCE	425	10- 9-57	812	232.5	85.9	9.5	100
	SCE	425	7-30-58	790	228.8	92.4	8.5	100
	SCE	425	8-11-59	800	235.6	80.3	10.0	100
	SCE	425	10-11-60	790	242.2	62.3	12.7	100
	SCE	425	8-10-61	695	251.6	83.3	8.35	100
	SCE	425	7-27-62	663	260.4	70.9	9.4	100
	SCE	425	8-6-63	574	270.0			100
29E2	SCE	694	7-11-52	1,174	173.9	59.8	19.6	100
	SCE	694	7-16-53	1,042	184.0	57.5	18.1	100
	SCE	694	10-19-54	966	202.8	112.2	8.6	100
	SCE	694	9-15-55	903	221.2	64.0	14.1	100
	SCE	694	10-25-56	746	232.2	78.0	9.5	100
	SCE	694	10- 7-57	668	240.0	100.0	6.7	100
	SCE	694	7-30-58	684	240.6			100
	SCE	694	10-11-59	628	245.4	119.2	5.3	75
	SCE	694	10-11-60	453	250.4	124.1	3.6	75
	SCE	694	3-16-61	557	239.0	106.3	5.2	75
	SCE	694	7-26-62	187	300.2	78.2	2.4	75
	SCE	694	8- 6-63	106	270.2	102.4	1.03	75
29G1	SCE	440	7-14-61	1,610	243.6	38.4	41.9	150
29G1	SCE	440	9- 7-62	1,431	260.5	65.5	21.8	150
29J1	SCE	390	6-19-58	743	218.8	16.2	45.9	75
	SCE	390	7-15-59	777				75
		390	7-31-61	772	247.6	21.2	36.4	75
29N1	SCE	560	7-22-52	791	c180.7	39.5	20	75
	SCE	560	7-16-53	694	f201.0	37.7	18.4	75
	SCE	560	8-19-54	901				75
	SCE	560	9-15-55	847	233.2	71.2	11.9	75
	SCE	560	10-25-56	837	g231.0	79.6	10.5	75
	SCE	560	10-25-56	h796	g231.0	69.0	11.5	75
	SCE	560	10-25-56	h725	g231.0	63.7	11.4	75
	SCE	560	8- 7-57	720	259.0	79.6	9.0	75
	SCE	560	7-30-58	778	254.8	75.0	10.4	75
	SCE	560	8-10-60	648	272.4	106.2	6.1	75
	SCE	560	8- 8-61	544	290.4	73.6	7.4	75
	SCE	560	7-26-62	505	299.2	91.4	5.5	75
	SCE	560	8- 6-63	467	307.5	104.3	4.5	75

See footnotes at end of table.

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
9N/13W-30E1	SCE	408	5-15-53	1,100	166.6	29.2	37.7	75
	SCE	408	10- 5-54	1,060				75
	SCE	408	11-14-55	1,066	189.5	23.3	45.8	75
	P	408	6-12-56	1,023	203	22	46.5	75
30P1	O	790	11- -61	2,800	240	40	70	150
31M1	D	820	3- -62	2,400				
	O	820	8- -62	900				100
31Q1	GS	443	4- -17	765	63			
32G1		600	3-21-63	810				75
32M1	O	678	3-14-63	1,170				100
32Q1		600	1961	1,305				125
34G1	SCE	805	7-11-52	1,657	152.0	80.2	20.7	125
	SCE	805	7-16-53	1,406	181.0	72.5	19.4	125
	SCE	805	8-19-54	1,241	191.1	67.2	18.5	125
	SCE	805	9-15-55	1,233	206.6	64.7	19.1	125
	SCE	805	10-25-56	1,163	186.7	76.7	15.2	125
	SCE	805	8-9-57	950	230.8	54.0	17.6	125
	SCE	805	7-30-58	1,052	225.8	112.2	9.4	125
	SCE	805	8-12-59	1,155	245.0	89.8	12.9	125
	SCE	805	8-10-60	1,241	242.0	83.2	14.9	125
	SCE	805	8- 8-61	1,177	242.3	98.9	11.9	125
		805	7-26-62	990	252.3	114.2	8.7	125
	SCE	805	8- 6-63	907	263.9	106.6	8.5	125
34Q1	SCE	600	7-11-52	1,428	158.5	32.5	43.9	100
	SCE	600	7-15-53	1,097	176.2	23.1	47.5	100
	SCE	600	8-19-54	1,035	180.6	21.9	47.3	100
	SCE	600	9-15-55	1,312	192.4	24.7	53.1	100
	SCE	600	10-31-56	1,395	178.6	26.0	53.7	100
	SCE	600	8- 7-57	1,164	216.8	25.3	46.0	
	SCE	600	7-30-58	1,239	204.0	28.4	43.6	100
	SCE	600	8-12-59	1,215	217.0	20.6	59.0	100
	SCE	600	8-10-60	1,238	227	13.4	92.4	100
	SCE	600	8- 8-61	1,172	229.4			100
	SCE	600	7-26-62	1,079	229.5	11.2	96.3	100
	SCE	600	8- 1-63	954	239.2			100

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
9N/14W-15P1		280	1962	720				75
15Q1	D	754	8-10-61	1,000	279	18	55.5	D
16K1		721	2-20-63	1,600				200
16M4	D		5- 6-63	1,000	309	23	43.4	220
	SCE	705	7-11-63	1,297				150
19P2	D	782	3- 4-63	1,000	305	33	30.3	220
20B1	SCE	540		1,717	249	37.8	45.4	150
21D1		600	6-28-62	750				125
22A1	SCE	350	2-21-63	585	280	20	29.2	60
22B1	SCE	350	2-21-63	810	280	20	40.5	75
23D1	D	728	3-18-63	1,000	280	28	35.7	220
25B1	SCE	360	6- -54	630	184	26	24.2	40
	SCE	360	3-23-60	630	206	29	21.7	40
25B2	SCE	640	12- -62	1,835	274	38	48.2	
25B3	D	666	12- -62	1,835	274	38	48.3	
25K1	SCE		6-16-53	848	181	86	9.8	
25P1	O	348.5	1962	550	220			
25Q1	SCE	1,015	6-23-54	1,710	228	37	46.2	
	SCE	1,015	8-24-56	1,630	274.2	23.6	69.0	150
	SCE	1,015	10- 5-60	1,287	307.8	19.9	64.6	150
27B1		557	2-21-63	600				75
27C1	D	500	1954	1,800				
	O	500	2-21-63	400	276			125
29E1		500	2-19-63	2,000	240			

USGS number	Source of data	Depth of well (feet)	Date of test	Pumping rate (gpm)	Water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of DD)	Horse- power
9N/14W-30H1			6-28-62	1,500				150
30K1	O	703	11- -61	1,170	257	56	20.8	125
31K1	D	675	1- 4-58	1,900	192	39	48.7	
31M1	D	713	2-10-63	1,200	e225	50	24.0	220
32C1		976	6- -62	2,000				200
34D1		500	8- -62	1,375				100
34M1	D	272.0	3- -63	180	255			D
36M2	O	628	2-28-63	1,000	305.2	45	24.1	100
36P1	O	1,000	2-28-63	500				50
9N/15W-11A1	D	760	1959	25	80	170	.15	
12M1	D	697	6- -52	1,200	435	25	48.0	

b. Test questionable.

c. Standing water level measured 15 minutes after pump turned off.

d. Well pumping water with air.

e. Standing water level measured 5 minutes after pump turned off.

f. Standing water level measured 10 minutes after pump turned off.

g. Standing water level measured 30 minutes after pump turned off.

h. Throttled discharge.

APPENDIX F

TABLE 6. CROSS INDEX OF OLD CALIFORNIA DEPARTMENT OF WATER RESOURCES
AND U.S. GEOLOGICAL SURVEY NUMBERS

TABLE 7. REFERENCES THAT CONTAIN WATER-LEVEL MEASUREMENTS IN WELLS
IN THE WESTERN PART OF THE ANTELOPE VALLEY AREA, CALIFORNIA

Table 6.--Cross index of old California Department of Water Resources
and U.S. Geological Survey numbers

The first column lists the numbers assigned to the well by the California Department of Water Resources prior to their adoption of the Geological Survey numbering system. The second column lists the numbers now applied to the well by both the Geological Survey and the Department of Water Resources.

Old DWR number	USGS number	:Old DWR : number	USGS number	:Old DWR : number	USGS number
7/13- 6A	7N/13W- 6A1	8/13- 7B	8N/13W- 7D1	8/15-36A	8N/15W-36M1
7/13-16A	7N/13W-16B1	8/13- 8A	8N/13W- 8D1	8/16- 5A	8N/16W- 5N1
7/13-16C	7N/13W-16B3	8/13- 8B	8N/13W- 8C1	8/16-18A	8N/16W-18H1
7/13-17A	7N/13W-17D1	8/13-22A	8N/13W-22K1	9/13-20A	9N/13W-20H1
7/13-21A	7N/13W-21B2	8/13-23A	8N/13W-23M1	9/13-20B	9N/13W-20H2
7/13-21B	7N/13W-21J1	8/13-33A	8N/13W-33Q1	9/13-35A	9N/13W-35P1
7/13-21C	7N/13W-21J2	8/14- 2A	8N/14W- 2P1	9/14-20A	9N/14W-20B2
7/13-21D	7N/13W-21J3	8/14- 2B	8N/14W- 2R1	9/14-24A	9N/14W-24Q1
7/13-27A	7N/13W-27N1	8/14- 6A	8N/14W- 6A1	9/14-24B	9N/14W-24K1
7/13-28A	7N/13W-28P1	8/14-10A	8N/14W-10C1	9/14-25A	9N/14W-25G1
7/14-10A	7N/14W-10F1	8/14-12A	8N/14W-12A1	9/14-25B	9N/14W-25B5
8/13- 6A	7N/14W- 6L1	8/14-12B	8N/14W-12D1	9/14-29A	9N/14W-29M1
8/13- 6B	7N/14W- 6N1	8/14-14A	8N/14W-14R1	9/14-32A	9N/14W-32D1
8/13- 7A	8N/13W- 7H1	8/15-24A	8N/15W-24B1		

Table 7.--References that contain water-level measurements in wells in the western part of the Antelope Valley area, California

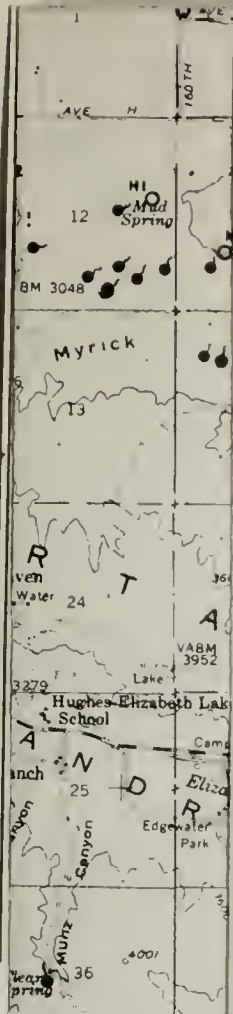
U.S. Geological Survey Water Supply Paper

Years for which measurements are available	1/ Number	Year published	Years for which measurements are available	1/ Number	Year published
1908-09	278	1911	1949	1161	1952
1915-22	578	1929	1950	1170	1953
1915-43	991	1945	1951	1196	1954
1944	1021	1947	1952	1226	1955
1945	1028	1949	1953	1270	1956
1946	1076	1949	1954	1326	1957
1947	1101	1951	1955	1409	1957
1948	1131	1951	1956-60	1770	1963

California Department of Water Resources Bulletin

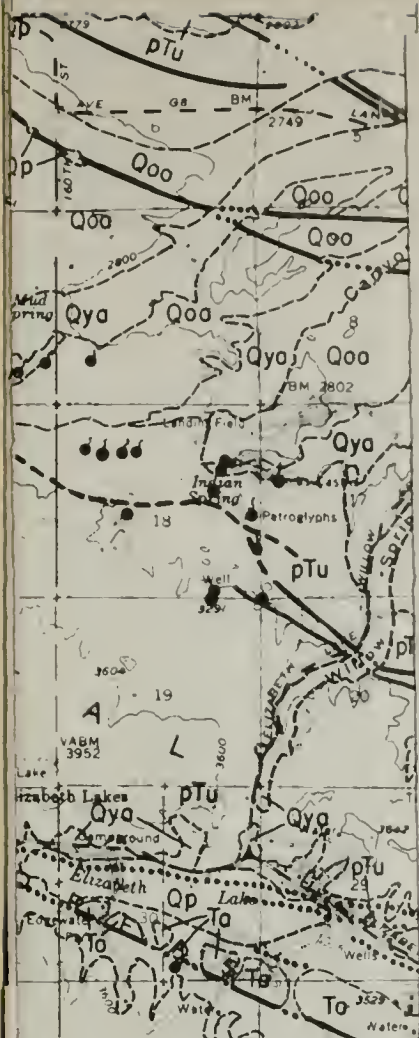
1941	39-J	1944	1951	39-T	1955
1921-42	39-K	1945	1952	39-U	1955
1943	39-L	1946	1953	39-V	1955
1944	39-M	1948	1954	39-W	1956
1945	39-N	1948	1955-56	39-56	1957
1946	39-O	1949	1956-57	39-57	1958
1947	39-P	1950	1957-58	39-58	1960
1948	39-Q	1953	1958-59	39-59	1961
1949	39-R	1954	1959-60	39-60	1961
1950	39-S	1955	1960-61	39-61	1963

1. For complete titles see selected references. Number refers to Geological Survey Water-Supply Paper or Department of Water Resources Bulletin.



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